

COUNTY BOROUGH OF ST. HELENS.



46TH

Annual Report

OF THE

Medical Officer of Health.

-BY-

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PREFACE.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

GENTLEMEN,

I have the honour to present the following report which deals with the health and sanitary circumstances of the borough for the year ending 31st December, 1918, and briefly reviews the work carried out under the direction of your medical officer.

POPULATION.

It is estimated that the civil population of the borough for the year 1918 was 90,600, and that the total population including those in military and naval service was 101,000.

MORTALITY.

To the epidemic of influenza must be attributed the abnormally bigh general death rate, which was the highest experienced since 1900, and was again considerably in excess of the death rate for the whole of England and Wales

Year after year the inhabitants of the borough pay in lives the tax demanded by insanitation. The unemptied cesspit, the ill-swept street, the unpaved yard and the overcrowded house rarely fail to take their toll. Every death from communicable disease represents illness among those who survive.

INFECTIOUS DISEASES.

Influenza beginning in July overshadowed the importance of other infectious disease. Before disappearing in March of this year is caused some 465 deaths, 315 occurring in the year 1918. Healthy adults were mainly the victims.

The usual biennial outbreak of measles began in 1917 and ended in the spring of the following year. In 1918, 1,106 instances of measles were notified and 233 patients were nursed at home. Efficient home nursing can do much in preventing death from measles.

Diphtheria and scarlet fever prevalent in St. Helens for fou successive years began to wane

Typhoid fever was again almost absent.

Small pox did not occur.

MATERNITY AND CHILD WELFARE.

No branch of public health work has met with the large measure of success experienced by maternity centres. In St. Helens, during 1918, 23,629 attendances were made by mothers and children to the three centres established by the council and 282 patients were admitted into the Old Whint Hospital. From the depots 42,500 lbs. of milk powder were distributed.

NEEDS OF THE DISTRICT.

There are five directions in which action must be taken if the health of the district is to be improved:—

The provision of houses for the working class and the closing and clearance of certain insanitary areas.

The provision of adequate hospital accommodation for maternity and for infectious diseases.

The conversions of the pail closets and privies now in use.

The abolition of the bricked ashplaces and the provision of closed ashbins.

The paving of yards.

STAFF.

It gives me pleasure to refer to the manner in which the members of my staff have carried out their duties. The efficient working of the department is dependent on the willing and loyal service of its members.

I am, Gentlemen,

Your obedient servant,

JOSEPH CATES.

July, 1919.

SUMMARY OF VITAL STATISTICS FOR 1918.

	St. Helens.	England and Wales.
Total Population—Estimated to the middle of the year—	ŕ	
ESTIMATED CIVIL POPULATION	90,600	
MARRIAGES	579	573,614
Annual rate of persons married per 1,000 of the total population	11.4	15.3
Births	2,435	662,773
Annual rate of births per 1,000 of the total population	on 24·10	17.7
Deaths	1,922	611,991
Annual rate of mortality per 1,000 of the civil population	21 · 2	17.6
Infant mortality rate per 1,000 births	126.8	97
Death-rate from diarrhœa of children under two years of age, per 1,000 births		10.99

ANNUAL REPORT

ON THE HEALTH AND SANITARY CIRCUMSTANCES OF THE BOROUGH FOR THE YEAR 1918.

St. Helens is situated in the south-west of Lancashire, about ten miles north-east of Liverpool and twenty miles west of Manchester. The coast is nearest at Seaforth, a town at the mouth of the Mersey, twelve miles west of the borough.

The line of the borough boundary is roughly the circumference of a sircle, the centre being at Peasley Cross, and the radius a distance of about wo miles.

The area is approximately 7,285 acres: the rateable value on the 31st March, 1918, was £393,617. A penny rate under section 211 of the Public Health Act, 1875, is estimated to yield £1,505.

On the north-east are the urban districts of Haydock and Ashton-in-Makerfield, and the rural district of Warrington. With these exceptions, he borough is bounded by the Whiston rural area.

From the south-west corner of the borough, about 270 feet above ea-level, the ground slopes gradually towards a belt of low-lying land attending from east to west across the district, and traversed by small treams which unite in the eastern part of the area to form the Sankey brook. One of these watercourses, known as Windle brook, passes through the centre of the thickly populated, north-western division of the borough. It appears that the older portions of the town were built though the banks of this stream. The land in the northern part of the borough the land inclines towards the Windle brook.

Between St. Helens and the coast, the land generally is low-lying and s used for agriculture.

The borough is divided into nine wards. Table 1, on page 23, hows the position, acreage, estimated population for 1915, and density of each ward calculated on the approximate area built upon.

At the Corporation Observatory in Victoria Park meteorological readings are taken once a day at 9 a.m.

Table 2 shows the annual rainfall in St. Helens since 1891.

The estimated total population of the borough at the middle of 1918 was 101,000. According to the figures revealed by the National Registration Act the civil population was estimated to be 90,600. Tables 3 and 4 give the number of inhabitants of the borough and of each ward as shown by the census returns of 1911.

The age and sex distribution of the population at the time of the last census is set out in table 5.

Table 6 gives the number of persons resident in the various institutions of the borough at the census period 1911, and also the figures for 1918.

The amount of out-door relief in money and kind supplied by the Guardians during the year ending the 30th September, 1918, to persons resident within the borough, and chargeable to the Union was £7,464 7 11.

It has been found impossible to obtain figures showing the amount of pauperism in the borough for a series of years, as the statistics are not prepared by Poor Law Authorities for separate sanitary districts, but for the whole Union, which comprises nineteen townships.

A Police Aided scheme to provide clothing for destitute children is in existence in the borough. As a result of useful work carried out during the past year 464 children received foot-gear and clothing, 997 articles being distributed.

Free meals to the number of 55,641 were provided by the local Education Authority for children selected from a school population of 20,049. In addition there were 32,384 meals supplied on payment.

There are two general hospitals in St. Helens, containing 377 beds for the relief of those residing within the borough and the surrounding district. Neither institution accepts maternity cases or patients suffering from venereal diseases. There are no resident medical officers. Patients are expected to pay for a medical practitioner. Admission to the St. Helens Hospital is limited to penny-a-week subscribers and their wives and children

Accommodation is provided by the Corporation at the borough hospitals for persons suffering from scarlet fever, diphtheria, enteric fever, smallpox, tuberculosis and certain other diseases. Maternity and child welfare cases are also admitted.

A voluntary Association for the aid of crippled children has rendered valuable help during the year to 64 patients, by the provision of apparatus, pinal carriages, and hospital treatment.

A Fresh-Air Fund sent 40 children to convalescent homes for a period of at least three weeks, and also provided in other ways for a large number of cases.

The Education Authority contributed £483 0 0 towards the mainenance of children at surgical homes and other institutions.

A Nursing Association, by means of voluntary contributions, maintains a superintendent and seven nurses to attend suitable cases in their own nomes, except those residing in an outlying area. One thousand one nundred and eighty four new cases and 125 old cases were nursed during the year, the total number of visits amounting to 275,504.

The Council supply water is obtained from deep wells in the new red sandstone. There are six pumping stations. A portion of the water is pumped to a central reservoir, and before being distributed is softened by liming process, the average hardness before and after softening being, according to Clark's scale, 22·1° and 10·5% respectively. During the year ending 31st December, 1918, 1,574,804,439 gallons were used, 1,133,615,239 for domestic supply, and 441,189,200 for trade purposes. The vast majority of houses in the borough are supplied from the Corporation mains. The supply is constant, but on two occasions during 1918, has proved insufficient. A few farms and cottages are still supplied from shallow wells.

The Sankey brook, formed by the union of Windle, Sutton and Rainford prooks together with several small watercourses, passes through the north-astern quarter of the borough, closely following the course of the St. Helens Canal. It receives the effluent from the Corporation sewage works and also an amount of untreated sewage and trade effluent. The canal at Gerards Bridge is greatly polluted with crude sewage.

Drains are laid in practically the whole of the populous portions of he borough. There is separation of sewage and storm water in the Denton's Freen and Newtown areas, surface and storm water being turned into Vindle brook. In the outlying districts a number of houses have been wilt in a situation remote from a sewer. About three-quarters of the sewage of the borough is treated at the Parr sewage works by liming and sedimentation; the effluent, varying greatly in composition, is discharged into the bankey brook. The remainder of the sewage is turned, untreated, into

the same watercourse. The bulk of the material collected from the conservancy system is treated at a depot in Parr. A portion of the substance obtained from privy middens is sold to farmers.

Tables 7 and 8 show the estimated number of houses with the various types of sanitary conveniences existent in the borough each year since 1907, and the number of conversions completed since 1904. Owing to the war there has been a considerable diminution in the number of conversions carried out.

There are fifteen public conveniences situated in various parts of the town. Eleven are modern structures, but in only one instance is there water closet accommodation. Additional provision is urgently needed, both as regards closets and also urinals for women.

The Public Baths are situated in Boundary Road. The total number of baths used during the year was 170,413, being 97,681 plunge baths, 10,993 slipper baths, 97 vapour baths, and 61,640 baths were provided free for soldiers.

Removal of house refuse, and the emptying of tub and pail closets and privy middens are undertaken by the Corporation. The removal of the contents of privy middens is carried out about three times a year, and at less infrequent intervals on request. Pail closets and ashplaces are emptied about once a week. Fish refuse and other material liable readily to decompose are taken away weekly. Bricked ashpits and ashplaces with wooden doors are common in the borough. The conversion of these to moveable wall bins of the tippler type is slowly being proceeded with, 20 were converted during the year and 40 circular bins provided. In new houses moveable bins are generally provided.

About three-quarters of the house and trade dry refuse is treated at a destructor in Boundary Road. During 1918, 10,658 tons were destroyed. The actual cost of labour per ton for destruction only was 3s. 7d., and the approximate allowance for the sale of steam amounted to £706.

The remainder of the house refuse is tipped at Parr.

The general condition of the streets, passages and footpaths is unsatisfactory and in some areas of the town extremely insanitary.

Street sweeping is carried out by the Corporation. The main streets are cleansed about twice a week, the side streets and passages about once a week. The cleansing and sweeping of footpaths adjoining dwellings is the duty of occupiers, and is generally neglected.

The total number of visits made by the sanitary inspectors was 9,522.

Table 9 contains a list of notices served during 1918, and a record f previous years.

There were in the borough at the beginning of the year 4 common odging houses registered for the reception of 183 lodgers.

During 99 inspections 15 infringements of Byelaws were discovered.

There were 12 houses let in lodgings on the register at the commencement of the year, but there are a large number of houses illegally used as ouses let in lodgings. The houses on the whole are only moderately well tept. One hundred and three inspections were made, and 10 notices were erved.

There are 108 bakehouses on the register; one is underground. In the second declaring the year, and after notice 12 were remedied.

There is room for considerable improvement both in the sanitation of he premises and in the standard of cleanliness observed.

No canal boat was inspected during the year.

At least 9 offensive trades are carried on within the borough. There re 5 tripe dealers, a manure manufacturer, a fat melter, a bone boiler, and gut scraper. In many cases the premises are structurally unsuitable.

No instance was discovered of the use of an underground room as dwelling.

An enquiry was continued under the auspices of the Committee for he Investigation of Atmospheric Pollution.

When the atmosphere of a district is polluted by the imperfect comjustion of coal, an indication of the extent of the pollution can be obtained by collecting rain water and estimating the amount of soot and tarry natter therein.

The results of the enquiry and figures relating to similar investigations n other towns are set out in table 10. Briefly it is shown that approxmately a ton of soot per acre was deposited during the year in the centre of the town.

Twenty-six persons are registered as cow keepers. There are about 80 cows kept for dairy purposes within the district. The animals are

inspected four times a year by a veterinary surgeon appointed by the Committee. Eight defects in the cowsheds were reported during 1918. A higher standard of cleanliness might be observed both in the methods of milking and in the state of the sheds, and insufficient use is made of the means of ventilation provided.

During 1918 no milk shop dealers were added to the register, but 6 were removed, 120 remaining on the register at the end of the year.

Although the committee now insist that milk sold from shops shall be stored in special receptacles, yet there can be little doubt that the risk of contamination in certain cases is considerable. General dealers should not be permitted to sell milk.

No systematic bacteriological examination has been made of milk sold within the borough.

A municipal abattoir is in a central position and has in connection with it cold air stores. Two thousand, nine-hundred and ninety-one beasts, 472 calves, 7,992 sheep, and 3,457 pigs were killed in the public slaughter-house during the year. No utilisation is made of the offal or other waste products. Five private slaughter-houses still remain in the borough, and are without exception unsuitable and generally insanitary. Only one is in regular use. The licensee of each private slaughter-house keeps a register of animals slaughtered and makes a weekly return to the medical officer of health. An inspection of meat exposed for sale is regularly carried out. The number of animals killed in the private slaughter-houses during the year was 10 beasts, 140 sheep, 1,922 pigs.

Table 11 shows the number of animals found on slaughter to be diseased, and the approximate weights of meats condemned at the abattoir and at the private slaughter-houses.

No definite epidemic of food poisoning occurred in the borough during 1918, but it is almost certain that the majority of the 18 deaths which occurred from diarrhœa and enteritis can be directly attributed to infected food.

One informal sample of milk was purchased and was found to be genuine. Ninety-eight formal samples were taken and 7 were adulterated or otherwise tampered with.

Table 12 shows the results of the analysis of milk samples, and the magisterial proceedings are set out in table 51. The number and nature of samples taken during the year are given on table 13.

Owing to the war only two notices have been served under the provisions of the Housing and Town Planning Act, 1909, and under section 141 of St. Helens Improvement Act, 1869.

A large number of closing orders and orders for demolition made by the Council are still in operation, but the houses are occupied and no steps have been taken to remedy the defects there existent. Since the outbreak of war overcrowding has largely increased.

During 1918, closing orders were made in respect of the houses numbers 1 and 3, Ross Street, but the houses are still occupied and the defects are still existing.

The inspection of factories is in the hands of the factory inspector appointed by the Home Office. Any act, neglect or default which can be dealt with under the Public Health Acts is referred to the Local Authority. Table 14 gives a list of matters so referred during 1918; the necessary alteration with one exception had been carried out at the end of the year.

The number of workshops registered is 209. These were visited on 339 occasions and as a result the defects snown in table 15 were discovered and in due course remedied.

Twelve workplaces are registered, the trades carried on being in one instance that of a plumber, in one a joiner, in three a wheelwright, in three a smith, and in two a mason. Two cab-yards are registered.

Several of the workshops and workplaces were closed temporarily owing to the war.

Occuriers of factories, workshops, or any place from which work of certain kinds is given out are compelled to keep a list of outworkers employed by them, and to send a copy of the list to the Local Authority on or before the 1st February and August in each year. Eight lists referring to ten persons were made out by employers during the year. None of the lists were sent in by the required dates. The outworkers were visited on 18 occasions; the surroundings under which the work was being done were found on the whole to be satisfactory.

Tables 16 to 20 furnish the returns annually required by the Home Office.

The Borough Isolation Hospital at Peasley Cross was erected to provide accommodation for 92 patients. Cases of scarlet fever, diphtheria, erysipelas, typhoid fever, puerperal fever, and when necessary other

diseases are admitted. Table 21 shows the number of patients treated in the institution during the year, and the duration of treatment.

The small pox hospital is situated at Old Whint. Thirty-six patients can be isolated. The hospital has been fully occupied by maternity and child welfare cases. Table 22 gives the number of patients treated.

Eccleston Hall Sanatorium has been fully used during 1918. Table 38 gives a record of admission and the condition of the patients on discharge.

A total of 17,283 days' institutional treatment was provided, 7,816 being for insured persons, and 1,486 attendances were made by them to the dispensary.

The proportion of notified cases of infectious diseases removed to hospital is given in table 24.

The staff on duty in the hospitals at the end of December consisted of a matron, eight sisters, ten staff nurses, thirty probationers, forty-two domestic servants and nine men.

The disinfecting station is situated at Peasley Cross Hospital. Visits to 1,519 houses were made for the removal of clothing and bedding for disinfection by steam. A list of the articles disinfected is given in table 27.

Infected rooms are now sprayed with a solution of formalin and closed for four hours. During the year 3,702 rooms were disinfected.

A motor ambulance is kept at the Peasley Cross Hospital, to convey patients to either of the Corporation hospitals. During the year the total distance covered was 16,430 miles. A motor van was also in use and completed about 9,300 miles.

The public mortuary is situated at the rear of the town hall and consists of a brick building containing two rooms.

Twenty bodies have been placed in the mortuary during the year, and eight post-mortem examinations were conducted.

A well-equipped laboratory is provided at the town hall. Examination of material from suspected cases of disease is carried out free of charge. The council now provide facilities for the diagnosis of cases of venereal disease, including the Wasserman reaction for syphilis.

The number of specimens examined during the year are shown in table 28.

Anti-toxins are provided free for persons suffering from diphtheria and other diseases. The outbreak of diphtheria enormously increased the bacteriological work.

The means adopted in the borough to control the spread of infectious disease do not differ in any important detail from those given in the annual report for 1914.

No instance of small pox was notified during the year.

The number of cases notified and the number of deaths occurring from small pox in the borough since 1873 are given in table 43.

Although the town has been comparatively free from the disease for several years it is to be feared that the increasing number of the population unprotected by vaccination will afford suitable material for an extensive epidemic. Table 29 shows the extent of vaccination in St. Helens since 1897.

Two cases of acute poliomyelitis were notified during the year, but no deaths were reported to be due to the disease. There was one case of cerebro-spinal fever.

During the year 756 cases of diphtheria and membraneous croup with 100 deaths have been reported, giving an attack rate of 8.3 and a death rate of 1.10 per thousand of the population. Table 31 sets out the record for previous years.

The number of cases removed to hospital was 703, or 92.9 per cent of the total cases notified. Table 30 gives a classification of the cases and the deaths according to the age of the patients.

Arrangements were made for the routine bacteriological examinations of the nose and throat of all persons living in the house from which a case of diphtheria was notified. In all 13,559 specimens were taken, mainly by the health visitors, and examined during the year, and of this number 1,436 showed the presence of the organism causing diphtheria. The "carrier" cases discovered were isolated either at home or in hospital, the patients were treated with diphtheria anti-toxin and local applications of antiseptics.

School children attending classes in which diphtheria had occurred were subject to routine swabbing of the throat.

Sixty-eight cases of eriysipelas were notified and three deaths were stated to have taken place from the disease; one case was removed to the isolation hospital.

During the year 568 notifications of scarlet fever were received, and twenty-four deaths were reported.

The numbers for previous years are shown in table 31.

The number of cases removed to hospital was 525 or 92.4 per cent of those notified. Table 33 gives a classification of the cases and deaths at various ages from scarlet fever during the year.

Seven cases of typhoid fever with two deaths were notified during 1918. Five of the cases were removed to hospital. Table 32 gives the record for previous years.

Eight women were reported during the year to be suffering from puerperal fever and five deaths were stated to be due to the disease. Five of the cases notified were removed to hospital. Table 32 gives figures relating to the cases reported in previous years.

Forty children were notified as suffering from ophthalmia. Twenty-three of the children were nursed at home, being attended by private practitioners and district nurses, while of the more severe cases seventeen were admitted into the isolation hospital.

The number of cases of measles reported during the year was 1,106 with 26 deaths. Table 31 gives the record for previous years.

The deaths at various ages during 1918 are shown in table 34.

Notifications of 814 cases of whooping cough with 24 deaths were received. Table 31 gives a record of the extent of the disease in other years.

During 1918, 48 deaths were attributed to diarrhoxa or enteritis, and of these 37 occurred in children under 2 years, being a death rate from these diseases of 15.1 per 1,000 births. Table 35 shows the deaths at certain age periods from both diseases.

The figures for other years are given in table 32.

The steps taken to prevent the loss of life from these diseases were given in the report for 1915.

During the year 153 notifications of pulmonary tuberculosis were received, 9 of the cases had been previously notified, 107 deaths from the disease were recorded. Table 32 shows the number of deaths stated to be due to the disease in past years.

Table 36 shows the division into age and sex groups of the primary notifications received.

Twenty-six deaths due to pulmonary tuberculosis occurred in persons concerning whom no notifications had been received.

The steps which are taken to prevent the spread of the disease are similar to those set out in the annual report of 1914.

Table 38 gives a record of cases admitted to Eccleston Hall.

Forty-one notifications of tuberculosis other than pulmonary were received during 1918. One of the cases had been previously notified. Thirty-four deaths were recorded. Table 32 shows the number of deaths attributed to forms of tuberculosis other than pulmonary since 1873. Up to the present, hospital accommodation has not been generally provided by the Local Authority for instances of non-pulmonary tuberculosis. Table 37 gives the age and sex distribution of the notifications received. Steps similar to those previously detailed are taken to follow up and prevent the spread of infection.

The tuberculosis dispensary is situated in Claughton Street.

The number of patients attending the dispensary is set out in tables 39 and 40.

The nurses made 143 first visits and 2,272 re-visits to the notified cases.

St. Helens was one of the first towns to provide free facilities for the diagnosis of cases of venereal diseases, and in 1918 further progress was made.

A complete scheme for the treatment of persons suffering from venereal diseases has been approved by the Local Government Board and is now in operation.

Table 26 gives a record of the work carried out.

Eighty-four deaths during 1918 were stated to be due to cancer and malignant disease.

Table 32 shows the figures for previous years.

Four hundred and four deaths were certified to be due to respiratory diseases other than tuberculosis. The number of deaths from these diseases in previous years is shown in table 31.

The number of deaths which took place from violence was 51.

Fifty-three inquests were held and 8 post-mortem examinations carried out.

In no less than 51 instances a death was registered without the cause of death being certified by the medical practitioner.

At the close of 1918, 32 women gave notices of their intention to practice as midwives within the borough during the ensuing year. The qualifications of these women were: Central Midwives Board examination certificate, fifteen; other recognised certificate, twelve; untrained, five.

Of the total births occurring in the borough 99 per cent were attended by midwives. No instance was discovered of a birth being attended by an uncertificated midwife.

The number of still births notified during the year was 34, about one-tenth of the correct figure.

Under the rule issued by the Central Midwives Board, a midwife mustand advise that medical assistance shall be obtained in any case where abnormal conditions occur during the confinement or in the lying-in period. Medical assistance was said to be required on 655 occasions.

Complete details of the scheme for maternity and infant welfare works carried on in the borough were given in the annual report for the year 1915, and need not now be re-stated.

The attendance at the maternity centre held in the medical officer's department at the town hall has proved so successful that a second centre has been established in the Marshalls Cross district, and a third in Oxford Street. A fourth in the St. Helens Junction area is contemplated.

The health visitors paid 1,251 visits to expectant mothers, and it is agreeable to record that almost without exception the visitors were well-received. Forty-five expectant mothers were admitted for treatments into the Corporation hospitals, and expectant mothers made 2,412 attendances at the centres.

The health visitors made 2,262 first visits and 13,396 total visits to infants and young children. Ten thousand four hundred and fifty-nine attendances were made by mothers, and 10,758 by infants to the infant welfare centres, and 282 mothers and children were treated in the corporation hospital at Old Whint.

During the year there were no less than 309 deaths of infants under one ear of age, giving a mortality of 126.8 per thousand births. Table 41 hows the infant death rate in St. Helens since 1873, and also the figures or England and Wales.

The diagram on table 42 illustrates the natural increase of the popuation—the excess of births over deaths, and in table 43 other important igures are shown.

The number of births registered during 1918 was 2,397, 44 occurring in other districts were transferable to St. Helens, and 6 occurring in the borough were transferred to other districts, making a total of 2,435. The birth rate for the year based on the total population was 24.10, showing an increase in the figures for the previous years. The chart on table 44 shows that an alarming decline has occurred in the birth rate for St. Helens since 1873; the rate for St. Helens, however, is still above that for the rest of the country. Table 45 gives the birth rate in the various wards of the own.

There were 88 illegitimate births registered, 27 occurring in other listricts were transferable to St. Helens, and 3 occurring in the borough were transferable to other districts, making a total of 112. The rate was therefore 1.1 per thousand of the population. Table 46 shows the proportion of illegitimate births during the past years.

The number of marriages during the year has been 579, giving a narriage rate (persons married) of 11.4 per thousand of the population. Table 47 shows the rate for past years.

The total number of deaths registered as having taken place within the borough during the year was 1,898. Of these 262 were deaths in St. Helens of persons usually resident in other parts, and were transferred by the Registrar General to the districts to which they belonged; 286 deaths of persons usually living within the borough occurred in other places, giving a total of 1,922 as the actual number of deaths to be accepted in estimating the death-rate for the year, and a recorded death-rate of 21.2 per thousand of the estimated civil population. Table 48 gives figures for the borough since 1873.

The death rates in the different wards for 1918 are set out in table 49.

Figures relating to the causes of and ages at death during the year are given in table 50.

In addition to the usual monthly statements of births, deaths and infectious diseases many special reports have been made to the committee during the year by the medical officer of health.

For the fifth year a large amount of work directly arising out of the war has been carried out by the medical officer of health and staff

A close inspection has been maintained of premises from which food is supplied to the army, enquiry has been made into cases of infectious diseases coming into the borough after discharge from military hospitals. Men suspected to be suffering from tuberculosis have been examined at the request of the recruiting officer, and bacteriological examinations have been conducted in the municipal laboratory.

Soldiers suffering from infectious or contagious diseases have been admitted into the Corporation Hospitals, and the disinfection of billets bedding and clothing has been carried out.

No official notice of billeting has been forwarded to the medical office of health.

INFLUENZA.

An epidemic of the disease called Spanish influenza which in the Spring of the year passed over parts of Europe and was in due cours brought into this country appeared in St. Helens in the first week of July and disappeared about eight weeks later. Some thirty-seven death took place from the disease or its complications. The symptoms were high temperature with sudden onset, sore throat, headache and muscula pains for about three days. The deaths were due to respiratory complications such as pneumonia or broncho-pneumonia. Recovery was generally rapid and there was not the lingering convalescence usually associated with influenza.

During the first week in October the disease re-appeared in St. Helen in a more virulent form. Although the fatality among children was small it seemed that the infection was being spread in the schools, and on Octobe 16th all public elementary schools were closed. Most of the secondary schools followed the same course. The magistrates at that time issued instructions whereby in places of public entertainment a longe

nterval was in force between the performances and disinfection of the building was carried out daily. All children under 14 years of age were excluded. The medical officer of health advised the closure of Sunday chools and other places where children congregated. Posters were issued etting out the precautions to be observed and offering a free supply of gargles and lotions for nasal couching. It is estimated that during the irst week in November over 2,000 persons in the borough were suffering rom influenza.

The public elementary schools were opened on November 18th but bout ten days later the epidemic again became serious and on November 19th the schools were once more closed. Regulations were issued by the Local Government Board giving Local Authorities power to enforce thorough ventilation in places of public entertainment. A film setting out the precautions to be taken was loaned from the Board and exhibited in St. Helens at various cinemas for about ten days.

To meet the need for hospital treatment a ward of twenty beds was et apart in the corporation isolation hospital for patients suffering from neumonia or other complications and 70 persons were admitted; the najority were dangerously ill but only 13 deaths occurred. The Local dovernment Board supplied to the medical officer of health a vaccine to protect those exposed to infection, but apart from the nursing staff in the corporation hospitals little advantage of the chance of protection was aken.

Four trained nurse, were provided by the corporation to nurse patients n their homes and 50 persons were attended. There is evidence that the killed nursing was the means of saving many lives. The outbreak waned arly in the present year and the schools were opened on the 7th January. It is middle of February influenza once more broke out in the porough and the type of the disease was again virulent. The public elementray schools were closed on the 19th February and re-opened on the 17th March.

During the whole of the epidemic from July, 1918, to April, 1919, 72 deaths from influenza were registered, but a large proportion of the 221 deaths in the same period from pneumonia could be correctly atributed to influenza. Table 54 shows the weekly number of deaths from nfluenza and pneumonia during the epidemic.

The outbreak clearly demonstrated the need for powers to prohibit

the congregation of persons in unsuitable premises during the prevalence of infectious disease. It was of doubtful utility to prohibit the attendance of children in school and in places of public entertainment when it was permissible for them to congregate in other places where suitable precautions were not taken to prevent the spread of disease. The medical officer advised that the attention of other local authorities should be drawn to this weakness in public health legislation, and that a suitable resolution should be forwarded to the Local Government Board.

The following resolution was passed:

"In the opinion of this Council it is desirable in the interest of public health that local sanitary authorities should be given powers to prohibit during the occurrence of epidemics of infectious disease the congregation of persons in buildings where suitable precautions to prevent the spread of disease, cannot be, or are not taken."

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 - ,, 3. Population of St. Helens at census periods
 - 4. Population of the wards
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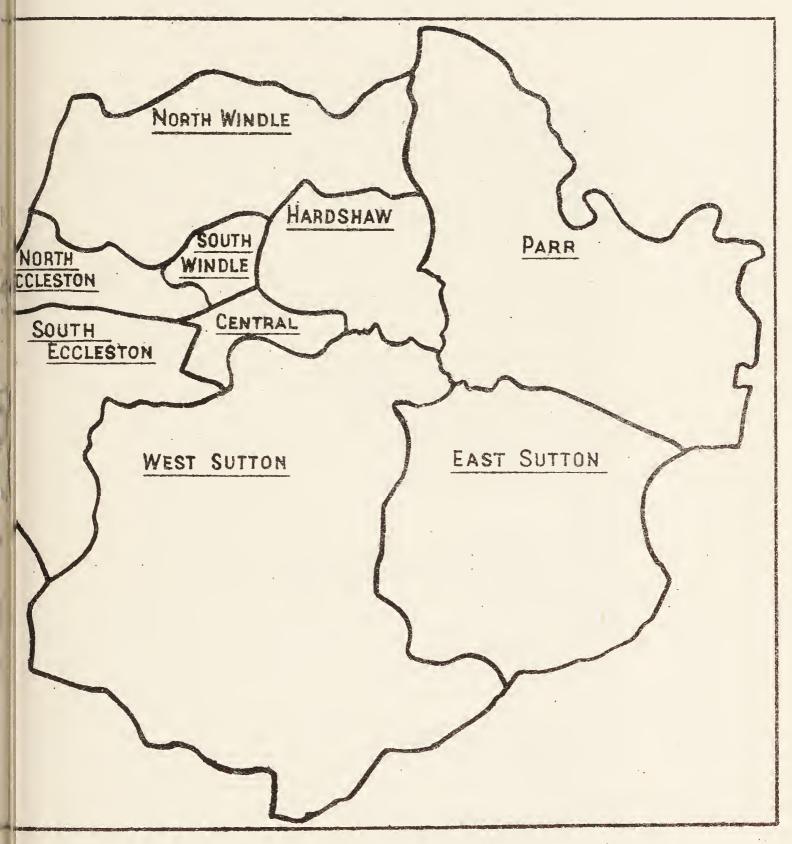
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- Table 37. Classifications according to age of cases of non-pulmonary tuberculosis
 - ,, 38. A record of cases admitted to Eccleston Hall
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Table 1.

Showing the position of the wards, the acreage, estimated population for 1915, and the density of each, calculated on the approximate area built upon.



The population, acreage, and density of persons in each ward.

WARD.	Population.	Area in acres.	Approximate Acreage unbuilt on.	Persons per Acre built upon.
North Eccleston	13,020	235 · 439	135	130 · 8
South Eccleston	13,030	$621 \cdot 625$	448	$75 \cdot 4$
Central	6,225	$94 \cdot 459$	2	$67 \cdot 4$
North Windle	12,680	$697 \cdot 084$	447	$51 \cdot 9$
South Windle	8,505	67 · 116	0	$127 \cdot 9$
Hardshaw	12,030	342.684	160	66 · 9
East Sutton	12,650	1,312 · 319	1,190	$103 \cdot 9$
West Sutton	10,960	$2,429 \cdot 151$	2,300	$85 \cdot 7$
Parr	13,100	1,484 · 550	1,394	145.5

Table 3.

The population of the borough at each census period.

Census of	*1801	*1811	*1821	*1831	*1841	1851	1861	1871	1881	1891	1901	19
Eccleston Sutton Parr	1,776	2,114	2,329	3,173	4,095	_	-	-	-		-	
Windle				}			-	_	-	_		
St. Helens	7,573	9,397	10,603	14,199	20,570	25,660	38,135	45,548	57,940	72,413	84,410	96,

^{*} Previous to 1851, the populations given are those of Eccleston, Sutton, Parr, and Windle, and are not strictly comparable to those of the present borough.

Table 4.
Population of the various wards as shown by census returns.

WARDS.	and 1901 1911					T.	Institution Large Establishm Vessels, 6 1911 (included (cols. 4 &		
	Inland Water).	1901	1911	Persons	Persons	Males	Females	Number	Popu- lation.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
St. HELENS	7,284	15,390	17,833	84,410	96,551	50,309	46,242	28	1,981
North Eccleston South Eccleston	$235 \cdot 43 \\ 621 \cdot 62$	_	$\begin{bmatrix} 2,253 \\ 2,337 \end{bmatrix}$	· ·	12,252 11,873	6,425	5,827 5,837		_
Central North Windle	94 · 4 697 · 08		$\begin{bmatrix} 1,077 \\ 2,446 \end{bmatrix}$	5,235	6,336	3,457 6,057	2,879 6,131	12	369
South Windle	67.11		1,533	8,315	8,279	4,261	4.018	1	59
Hardshaw East Sutton	$\begin{vmatrix} 342 \cdot 68 \\ 1,312 \cdot 31 \end{vmatrix}$		$\begin{vmatrix} 2,160 \\ 2,179 \end{vmatrix}$		11,526 $11,584$	6,128 6,186	5,398 5,398	6 3	$\begin{array}{c} 250 \\ 133 \end{array}$
West Sutton Parr	2,429·15 1,484·53	_	1,653 2,195		10,304	5,278 6,481	5,026 5,728	5 1	1,040 130

M61 TOTAL RAINFALL IN INCHES IN STHELENS SINCE 1890 +26! +681 £691 068!

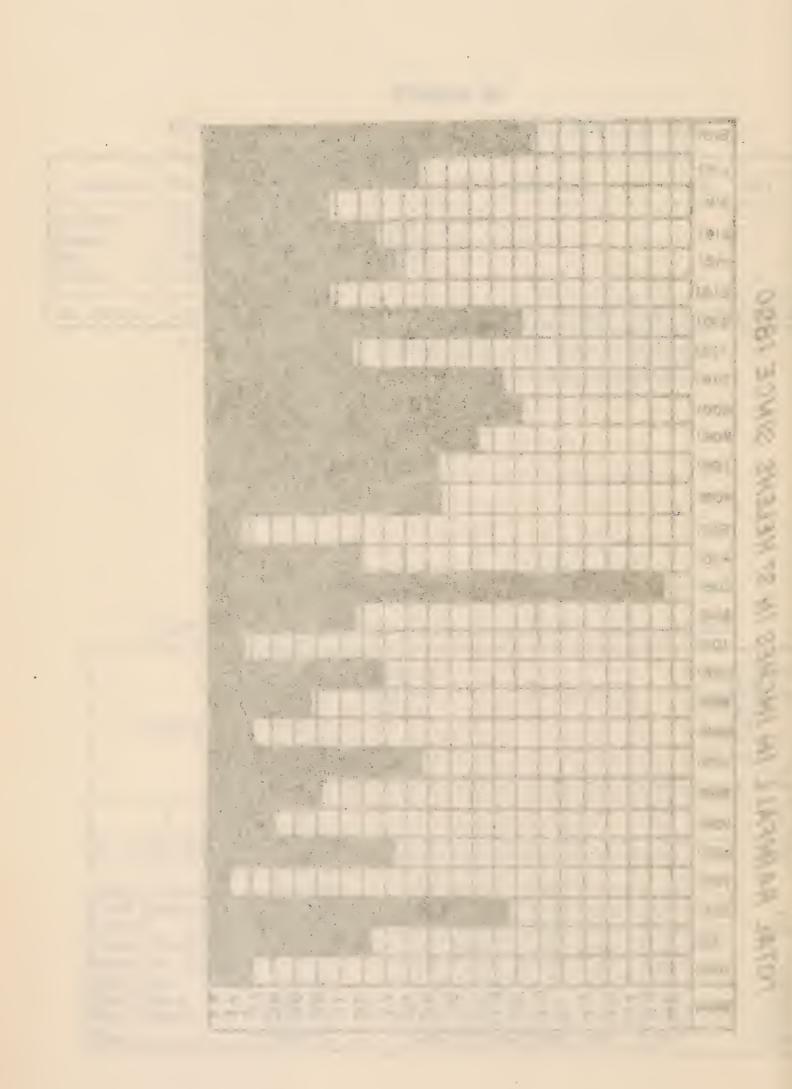


Table 5.

The age and sex distribution of the population at the census taken in 1911.

)	11				1	1
				Males	Females					Males.	Females
	ALL AGES			50,309	46,242						
U:	nder 1 yea	\mathbf{r}		1,344	1,301	Uno	der 5 ye	ears		6,462	6,285
1	and unde			1.250	1,269		and und			5,918	5,767
2		3		1,348	1,325	10	,,	15		5,419	5,332
3		4			1,208	15	,,	20		5,165	4,475
4		5		7 0 1 1	1,182	20	,,	25		4,755	4,021
	,,						,,				
5	,,	6		1,178	1,146	25	,,	30		4,271	3,773
6		7		1,234	1,213	30	,,	35		4,001	3,440
7		8	9 0 0	1,206	1,187	35	"	40		0 00 0	3,080
8	37	9	• • •	1,150	1,097	40	"	45	1	2,812	2,487
8 9	3)	10		1,150	1,124	45		50	1	2,424	2,154
	,,,			,	<i>x</i> ,		,,	00		_,	2,101
10	,,	11		1,106	1,091	50	23	55		1,917	1,690
111	**	$\overline{12}$		1,083	1,077	55		60		1,411	1,345
12	**	13		1,103	1,084	60	,,,	65		910	953
13	**	14	• • • •	1,062	1,041	65	"	70		652	651
14	**	15		1,065	1,039	70	"	75		349	478
**	.,	10	• • •	1,000	1,000		"	10	•••	010	1.0
15		16		1,033	946	75		80		141	231
16		17		1,058	887	80	"	85		51	64
17	, ,	18	• • •	1,036	862		,,	90	• • •	12	14
18	• •	19		1,081	878	90	"	95	• • •	4	2
19		$\frac{10}{20}$		$\frac{1,001}{957}$	902	95	"	100	• • •		4
	9 2	40	• • •	001	302	00	"	100	• • •		
20		21		951	835	100	years	and			
120	>>	21	• • 0	991	000	100	upward				
							apware	10	• • •		

Table 6.

The population of the various institutions in the borough.

	•	SO.						
	Total.	Person		1028	101		147	80
	н.	Males Females Persons Persons Males. Females Persons Males. Females Persons Males. Females Persons		06	23	_	61	12
	Officials and their Families.	Males.		81			4	1
1918.		Persons		171	23	*	65	12
	ates upers, etc.)	Females		451	21		43	78
	Special Inmates (Patients, Paupers, Lunatics, etc.)	Males.		406	22	*	39	
	Spe (Pati	Persons		857	78		85	78
	Total.	Persons		935	101	125	105	130
	٤٦	Females		78	32	35	33	19
	Officials and their Families.	Males		43	ļ	63	61	
1911.	о ж д	Persons		121	32	37	40	19
	ates upers, etc.)	Females	,	426	25	24	33	111
	Special Inmates (Patients, Paupers, Lunatics, etc.)			388	44	64	32	
	Spe (Pati L	Persons		814	69	88	65	111
	INSTITUTION.			County Asylum (part of) Rainhill	Providence Hospital	St. Helens Hospital	Peasley (ross	Blackbrook House Industrial School for Roman Catholic Girls

* The figures for this hospital could not be obtained

Table 7.

The number of houses with the various types of sanitary conveniences existing in the borough.

Year.	Water closet.	Tub and pail closet.	Privy midden.	Total.
1907	6,106	7,150	5,154	18,410
1908 1909	6,503 $6,718$	$7,120 \\ 7,071$	$4,907 \\ 4,795$	18,530 18,584
1910	$7,041 \\ 7,626$	$7,028 \\ 6,863$	4,616 4,338	18,685 18.827
1912 1913	9,205 $10,493$	5,734 5,058	4,019 3,542	18,958 19,093
1914	.12,316	4,058	2,829	19,203
1915 1916	,	$3,704 \\ 3,592$	$igg egin{array}{c} 2,529 \ 2,472 \ \end{matrix}$	$19,333 \\ 19,362$
1917 1918	13,455 13,504	3,422 3,401	2,353 $2,325$	$\begin{array}{c c} 19,230 \\ 19,230 \end{array}$

Table 8.

The number of conversions to the water carriage system completed each year since 1904.

	Privies.	Tub and pail closets.	Total.
1904	69	67	136
1905	80	64	144
1906	47	19	66
1907	237	125	362
1908	243	24	267
1909	106	38	144
1910	179	33	212
1911	270	129	399
1912	301	691	992
1913	460	646	1,106
1914	691	976	1,658
1915	300	380	680
1916	57	112	169
1917	45	103	148
1918	18	21	39

Table 9.

Number of notices served

	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916
To clean choked drains and w.c.'s	459	502	358	424	313	225	337	320	343	283
l de la la companya de la companya d	109	112	$\frac{338}{102}$	1	58)	1	77	5(
drain develling bougge	0	0	$\frac{102}{3}$	$\frac{31}{2}$	6	40			3	1
,, disconnect and ventilate drains	140	60	62			10	1	7	24	. 4
dies and dance or out t	24	35	29			8	10	0	2	(
,, disconnect downspouts, repair or lengthen w.p. to slopstones	59	139	86	ł			1		$5\overline{2}$	
,, provide w.p. to slopstones	16	33	25						61	25
"provide slopstones	34	44	$\frac{20}{32}$	1	55			1	12	
", repair w.c.'s, baths, basins, lavatories	01	1.1	02	0.7	0,0		20	10	12	i
and cisterns	76	123	92	132	171	88	121	258	269	14"
,, repair 100fs of dwelling-houses	98	154	119	257	161			1		
,, cleanse backyards, privies & passages	41	76	74	19	16		10		13	
,, cleanse and whitewash filthy dwellings	31	42	24	36	19	30			$\frac{1}{35}$	2!
,, provide doors to privies, pail closets,										
and ashpits	393	438	488	330	340	211	182	103	109	120
,, repair or rehang doors to pail closets,										
ashpits and privies	202	321	373	405	328	205	322	143	49	41
,, repair privies and ashpits	109	91	138	221	16	33	56		41	2!
,, repair eaves and downspouts	137	167	173	232	195	174	103	169	179	6
,, provide eaves and downspouts	95	90	78	14]	119	138	79	85	91	3:
,, repair pavement, etc., in backyards	211	398	318	323	6	113	174	214	206	7.
,, re-hang windows	81	8	7	9	4	5	29	82	78	3.
,, repair pavement and floors in dwelling-										
houses	75	100	65	179	145	179	139	219	109	4:
,, remove fowls, pigeons, etc., from near										
dwellings	8	19	3	9	9	9	12	27	19	(
,, remove pigs	10	15	10	15	14	14	10	1.8	14	
,, remove rubbish	18	46	52	7	8	6	6	11	19	1
,, remove manure	12	20	10	1.4	7	3	17	12	9]
,, reconstruct middensteads	8	14	9	1	2	4	8	2	5	
,, clean foul ditches and cesspools	17	6	39	11	4	12	14	4	0	
,, provide or repair ashboxes	527	532	328	54	;17	;42	;78		;53	2
,, remove nuisance due to overcrowding	$\frac{12}{32}$	30	11	36	36	24	20	34	53	. 1
,, replaster walls or ceilings of dwellings	62	173	107	288	209	248	164	274	276	8
,, prevent dampness in dwellings	22	41	25	74	48	21	72	87	95	4
,, remove sheds, etc., from backyards	8	5	3	7	8	4	8	4	$\frac{12}{2}$	
,, remedy defects in bake houses	$\frac{25}{16}$	35	31	17	7	5	2	7	25	
,, remedy defects in workshops	16	39	20	22	9	12	42	$\frac{22}{4}$	15	2
,, remedy defects in cowsheds & dairies	24	1	$\frac{2}{2}$	15	10	4	7	4.	22	1
,, provide water supply	170	957	205	31	207	107	33	1	1	10
,, remedy miscellaneous nuisances	$\frac{170}{291}$	257	$\frac{205}{160}$	285	$\frac{297}{764}$	187	144	206	376	13
,, convert to water carriage	381	264	169	322	704	1,128	4,440	1,882	449	9
Totals	3 508	4,430	3 670	4 200	3 505	3 500	5 002	4 451	3 308	1.50
LUUAIS	0,000	1,100	9,070	1,400	0,000	0,000	0,090	x, 201	0,000	1,08 ,

Table 10.

Metric tons of total solids per square Kilometre deposited during the year 1918.

A metric ton per square Kilometre is approximately 9lbs. per acre.

-	Leicester	$166 \cdot 92$
	Meteorological Office	$132 \cdot 84$
	Embankments Gardens	$290 \cdot 28$
	Finsbury Park	$177 \cdot 96$
London	Ravenscourt Park	150.60
	Southwark Park	$207 \cdot 96$
	Wandsworth Com	60.80
	Golden Lane	$155 \cdot 32$
	Malvern	31.32
Man-	Queen's Park	$116 \cdot 64$
CHESTER	School of Technology	$168 \cdot 12$
	Newcastle-on-Tyne	$249 \cdot 72$
	Rochdale	$405 \cdot 72$
	St. Helens	244.80

Table 11.

Number of animals slaughtered and amount of diseased meat destroyed

		Private						
	ABA	SLA	UGHTE	R HOUS	ES.			
1918	Killed.	Disectory Tuber-culosis.	Weight in lbs.	Killed.	Disectory Disect	other diseases.	Weight in lbs.	
Beasts Calves Sheep Pigs	. 472	231 0 0 66	390 4 195 144	$65,319 \\ 70 \\ 7,595 \\ 3,725$	$ \begin{array}{c c} 10 \\ 0 \\ 140 \\ 1,922 \end{array} $	$\begin{array}{c} 0\\0\\0\\143\end{array}$	$\begin{vmatrix} 3 \\ 0 \\ 3 \\ 141 \end{vmatrix}$	$ \begin{array}{c c} 20 \\ 0 \\ 40 \\ 4,920 \end{array} $

About 6,272 lbs. of fish, 840 lbs. rabbit, 16,128 lbs. vegetables, and 100 lbs. of other foodstuffs were found to be unsound and were destroyed.

Table 12.

The results of analyses of milk samples.

F	Per					FA	T.		· · · · · · · · · · · · · · · · · · ·			
	ent	Under 2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	Over 3.5	Total.
	Under 8·1				1	1					2	4
	8.2										1	1
	8.3										1	1
DS.	8.4							-			5	5
SOLIDS.	8.5							1	1	2	4	8
-	8.6					2	1	1			4	8
NON-FATTY	8.7			1			1	1			9	12
NON	8.8				1		1		5		7	14
	8.9	}	1		1	1		1	1	2	7	14
	9.0		1				1				3	5
	Over 9.0				1		2	2	2	1	19	27
To	otal		2	1	4	4	6	6	9	5	62	99

Table 13.
Results of analyses of other foods.

	Number of			Number of					
			sam	ples	-		}	samples	
			Exam-	Adul-		Andrew Committee and Committee		Exam-	Adul
			ined.	terated				ined.	terate
Milk			99	7	Sugar	. •		2	0
Butter			5	0	Mustard			0	0
Cheese			2	1	Confection	nery &	Jam	4	0
Margarine			5	0	Pepper			0	0
Lard			0	0	Sausage			10	4
Bread			1	0	Beer			9	0
Flour			14	0	Spirits			0	0
Tea			3	0	Drugs			2	1
Coffee			12	0	Other arti	cles		38	1
Cocoa			2	0	TOTAL			208	14

Table 14.

Defects discovered in Factories.	19.	18
Insufficient sanitary accommodation	• • •	3
No screens to sanitary conveniences	• • •	1
No suitable partitioning of sanitary conveniences	• • •	1
No intervening space between closets and machine room	• • •	3
Limewashing of walls and ceilings required	• ,	2
No inside fastens on doors of women's closets		4.
Closets insufficiently ventilated		2
Table 15.		
Defects discovered in workshops.		
Limewashing of walls and ceilings required	• • •	3
Cleanse vard		1

Table 16. HOME OFFICE TABLES.

1.—Inspection.

Including inspections made by sanitary inspectors or inspectors of nuisances.

	Number of			
Premises.	Inspections.	Written Notices.	Prosecutions	
Factories	21	11		
(Including Factory Laundries.) Workshops	318	20		
(Including Workshop Laundries.) Workplaces	5	0		
Total	344	81		

Table 17.

2.—Defects found.

	Nu	27			
P8	Found.	Remedied.	Referred to H.M. Inspector.	Number of Prosecution	
Nuisances under th Want of clean	he Public Health Acts:—*	4			
Want of ventils	ation	1	1		/
Overcrowding					
Want of drains	-		_		
Other nuisance	es				-
Clauskamer	(insufficient				
Sanitary accommoda-	unsuitable or defective				
tion.	not separate for sexes	1	1		
Offences under the Illegal occupation houses (s. 10			_		
Breach of spec for bakehous	;;	3			
Other offences	1	1			
	Total	10	10		·

^{*} Including those specified in sections 2, 3, 7 and 8 of the Factory ar Workshop Act, 1901, as remediable under the Public Health Acts.

Table 18.

3.—Home work.

9.	110111	O WOIN		
	0	OUTWO SE	RKER CTION	S' LISTS, 107.
	Lists	received		1
		nployer		
Nature of Work.		ling twi		Notices served
		the year		on Occupiers as
			orkers	to keeping or
	Lists	Con-	Work-	sending lists.
1		tractors.	men	_
1	2	3	4	5
Wearing Apparel—				
Making, etc	5	1	õ	= 4-mir
Cleaning and washing				
Household linen				_
Lace, lace curtains and nets				-
Curtains and furniture				
hangings Furniture and upholstery				
Flootro mloto				abeligus.
Filo malrino	1			directories.
Brass and brass articles)		
Fur pulling				
Cables and chains				
Anchors and grapnels				
Cart gear				, Mallacogles
Locks, latches and keys				Annual Control
Umbrellas, etc				
Artificial flowers				
Nets, other than wire nets				magn. v
Tents				
Sacks	-	***************************************		
Racquet and tennis balls				
Paper, etc., boxes, paper				
bags Brush making				
Dog mighting				
Foother gerting				
Carding, etc. of buttons etc				
Stuffed toys				
Basket making				
Chocolates and sweetmeats				
Cosaques, Christmas crac-				
kers, Christmas Stockings				
etc	-		_	
Textile weaving	-	_		
Total	6		5	
TOTAL	(,		0 (

Table 19.

4.—Registered workshops.

Workshops on the R	(1	X		ond or	ono y ca		Nun (
Dressmakers and m	antle m	aking					L
Milliners					• •	†	
Tailors							
Hosiery Knitters							
Joiners, builders, ca	abinet-m	akers	and p	lumber	etc.		
Blacksmiths, wheely							
Weighing machine					• •		
Cloggers and boot							
Cycle makers	140						
Cooper							
Tripe Dresser							
Herbal Brewer							
Pearl Ash Manufact							
Seltzogene, charge i							
Tea wrapping							
Drysalter			• •		• •		
Leadlight maker				• •			
Cab washing				• •	• •	• •	
Saddler			• •	• •		• •	
Knackers Yard		• •	• •	• •	• •	• • •	
Sundries		• •	• •	• •		• •]
fee Cream Makers					•	• •	
The Creatin makers							

Table 20.

5.—Other matters.

Class.	Number.
1	2
Matters notified to H.M. Inspector of Factories:— Failure to affix Abstract of the Factory and Workshop Acts (S. 133, 1901)	() 16
the Factory and Workshops Reports of Action taken sent	15
Acts (S. 5, 1901) to H.M. Inspector.	
Other	Nil
Underground Bakehouses (S. 101):—	
Certificates granted during the year	-
In use at the end of the year	1

Table 21.

Admissions, discharges, and deaths of St. Helens Patients during 1918.

Peasley Cross Isolation Hospital.

DISEASE.	In hospital Jan. 1st, 1918.				Dis- charged.		Died		In hospital Jan 1st, 1919.		Patient days 1918.	
	M	F	M	F	M	F	М	F	M	F	M	F
phoid fever arlet fever phtheria asles her diseases	$ \begin{array}{c} \hline 31 \\ 31 \\ \hline 1 \end{array} $	32 28 —	3 253 321 1 21	$ \begin{array}{ c c c } \hline 2 \\ 272 \\ 382 \\ 1 \\ 20 \\ \end{array} $	3 265 286 1 14	$ \begin{array}{c} 2 \\ 275 \\ 351 \\ 1 \\ 12 \end{array} $	5 43 -6	$ \begin{array}{c} \hline 12 \\ 37 \\ \hline 4 \end{array} $	$ \begin{array}{c} $	$\frac{-}{17}$ $\frac{22}{4}$	$ \begin{array}{r} 86 \\ 9587 \\ 10040 \\ 23 \\ 204 \end{array} $	$9927 \\ 11692$
	63	60	599	677	569	641	54	53	39	43	19940	$\frac{-}{22072}$
nereal diseases	15	23 1276 2 31		1210 32		107		82		420 103		
Total	15	25	130	07	124	42	10	08	82		43047	

Table 22.

Admissions, discharges and deaths of St. Helens patients during 1918, Old Whint Hospital, Haydock.

PISEASE	In hospital Jan 1st, 1918.		n Ist, Admitted		Discl	Discharged		Died		In hospital Jan 1st, 1919.		Patient days, 1918.	
	М	F	М	F	M	F	M	F	М	F	М	F	
ternity hies servation cases hooping cough rasmus eumonia her diseases		7 1 1 - 3 - 1	$ \begin{array}{r} $	45 1 2 1 23 8 62 142	$ \begin{array}{r} $	144 2 1 	$-\frac{2}{8}$ $\frac{1}{9}$ $\frac{2}{20}$	$ \begin{array}{c c} \hline & 1 \\ & 2 \\ & 1 \\ & 7 \\ & 3 \\ & 11 \\ \hline & 25 \end{array} $	3	7 - 4 -7 18		2237 95 438 2 1288 197 2867 7124	
on in hospital by with sick mother ther with sick baby			18 10 —	17 8 10	12	13 8 10	2	2	4	2	442 306 —	404 250 213	
Total	10	$\frac{13}{3}$	105 28	177 2	$\frac{86}{22}$	$\frac{143}{9}$	22	$\frac{27}{9}$	7	7	125	7991 53 2	

Table 23.

Admissions, discharges, and deaths of Haydock patients during 1918
Peasley Cross Isolation Hospital.

DISEASE.	In hospital Jan. 1st. 1918		Adm	Admitted. Dischar		narged	ed Died.		In hospital Jan. 1st, 1919,		Patient days 1918.	
	M	F	M	F	M	\mathbf{K}	M	F	M	F	M	F
Scarlet fever Diphtheria Enteric fever		2	22 — 1	14 1 1	22 - 1	14		I —	1	1 1	877 - 57	39 16 70
Other diseases				2		1		1				24
	2	2	23	18	23	16	1	2	1	2	934	50(
Total		4	4	1	3	9		3		3	14	40

Table 24.

Percentage of cases of infectious diseases removed to hospital.

	1912.	1913.	1914.	1915.	1916.	1917.	1918.
Scarlet fever .	85.6	82 · 8	87 · 1	98 · 4	96 · 6	97.07	92 · 4
Diphtheria	69.6	70.9	88.3	93.0	92 · 7	96.4	92 · 9
Enteric fever .	93.0	100.0	$92 \cdot 5$	100.0	100.0	100.0	71 1
Puerperal fever	50.0	50.0	64.7	100.0	60.0	100.0	62.5
Erysipelas	7 · 5	4.0	1.8	5.4	1.2	4.01	1 1
Phthisis	70.0	34.3	55.5	67.6	75.0	92.6	89 · 5
Ophthalmia	0.0	0.0	11.5	12.6	11.5	33.33	$42 \cdot 5$

Table 25.

MATERNITY AND INFANT WELFARE CENTRES	First visits	Subsequent visits
Number of expectant mothers attending the centres. Number of mothers attending the centres. Number of children attending the centres.	1,451 1,575	$ \begin{array}{c} 644 \\ 1,062 \\ 1,074 \end{array} $
Number of attendances of $\begin{cases} \text{expectant mothers} \\ \text{mothers} \\ \text{children} \end{cases}$	2,4 10,4 10,7	59

Table 26.—Venereal Disease.

Annual return relating to persons residing in the County Borough of Helens who were treated at the Treatment Centre at Claughton Street ring the year ending on the 31st December, 1918.

			1
1 N	Number of persons dealt with at or in connection with the out-patient Clinic for the first time and found to be: Suffering from syphilis	Males 26	Females 23
	" " soft chancre	$\frac{1}{20}$	2 8
2 N	TOTAL Tumber of persons discharged from the out-patient Clinic after completion of treatment for:—	53	33
	Syphilis		
3 N	TOTAL Tumber of persons who ceased to attend the out-patient Clinic without completing treatment and who were suffering from:—		
	Syphilis Soft chancre Gonorrhœa	15 	10 -2
'r	otal attendances of all persons at the out-patient Clinic	26	12
3	who were: Suffering from syphilis	338	266
	Not found to be suffering from venereal disease.	234	5 11
A	ggregate number of "In-patient days" of treatment given to persons suffering from venereal disease	581	282 035
to (IN-PATIENTS Tumber of doses of Salvarsan substitutes given:— Galyl (1) St. Helens patients	Do 6"	
((1) St. Helens patients	25. 5.	
	For detection of spirochetes ,, ,, ,, gonococci ,, Wassermann reaction Others (b) Specimens from persons attending at the Treatment Centre which were sent for examination to an independent laboratory:—	None.	
	For detection of spirochetes, ,, ,, gonococci, Wassermann reaction	3° 126	7
		1.68	

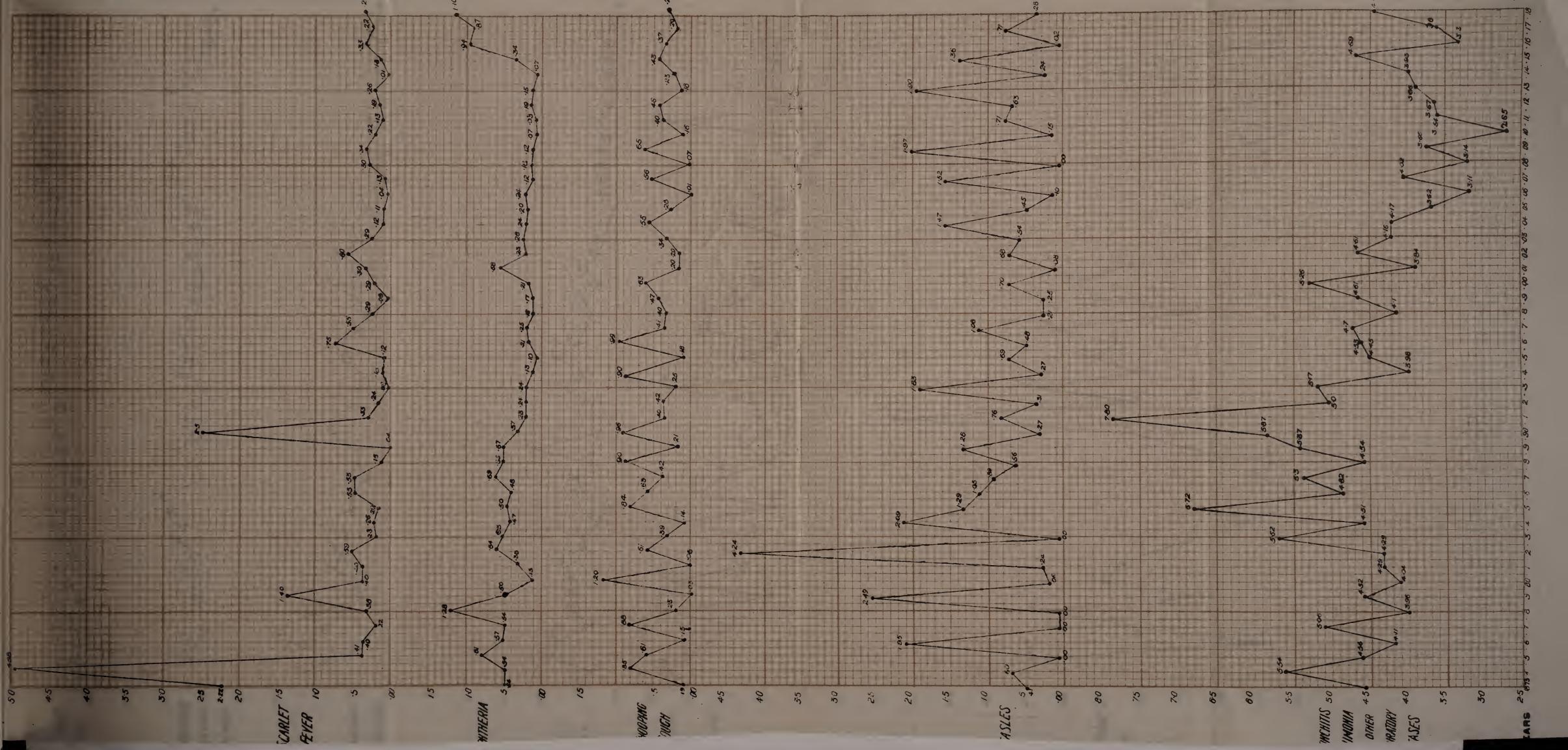
Table 27.

Amount of clothing, etc., disinfected during 1918. Hospital clothing and bedding 8,543 4,760 Blankets, sheets, and rugs ... Pillows and cushions 3,944 2,014 Beds ... Other articles of clothing ... 9,513 Library books 276 6,115 Other articles . . . Blankets and rugs for soldiers ... 650 Articles of clothing for soldiers 300 Total 36,115

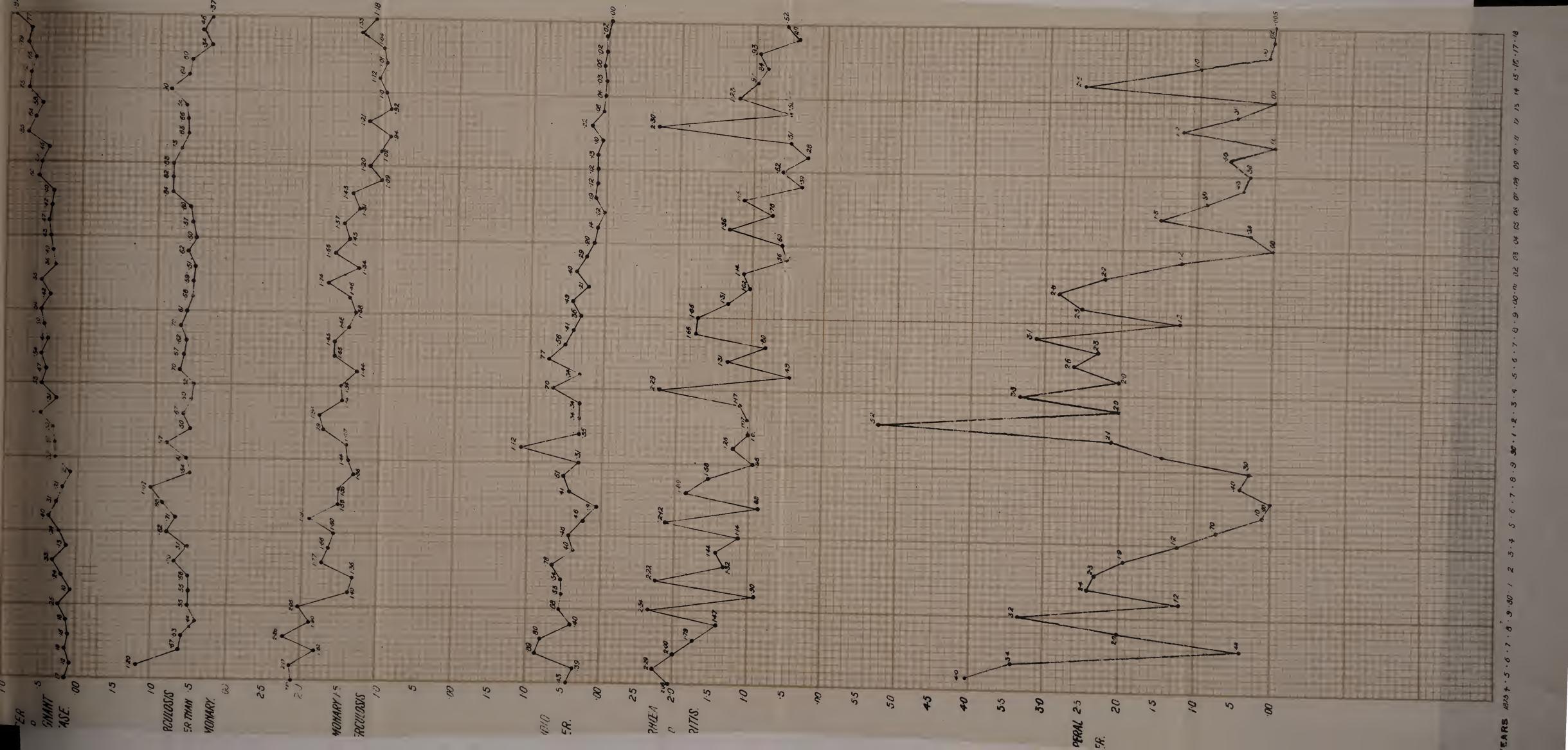
Table 28.

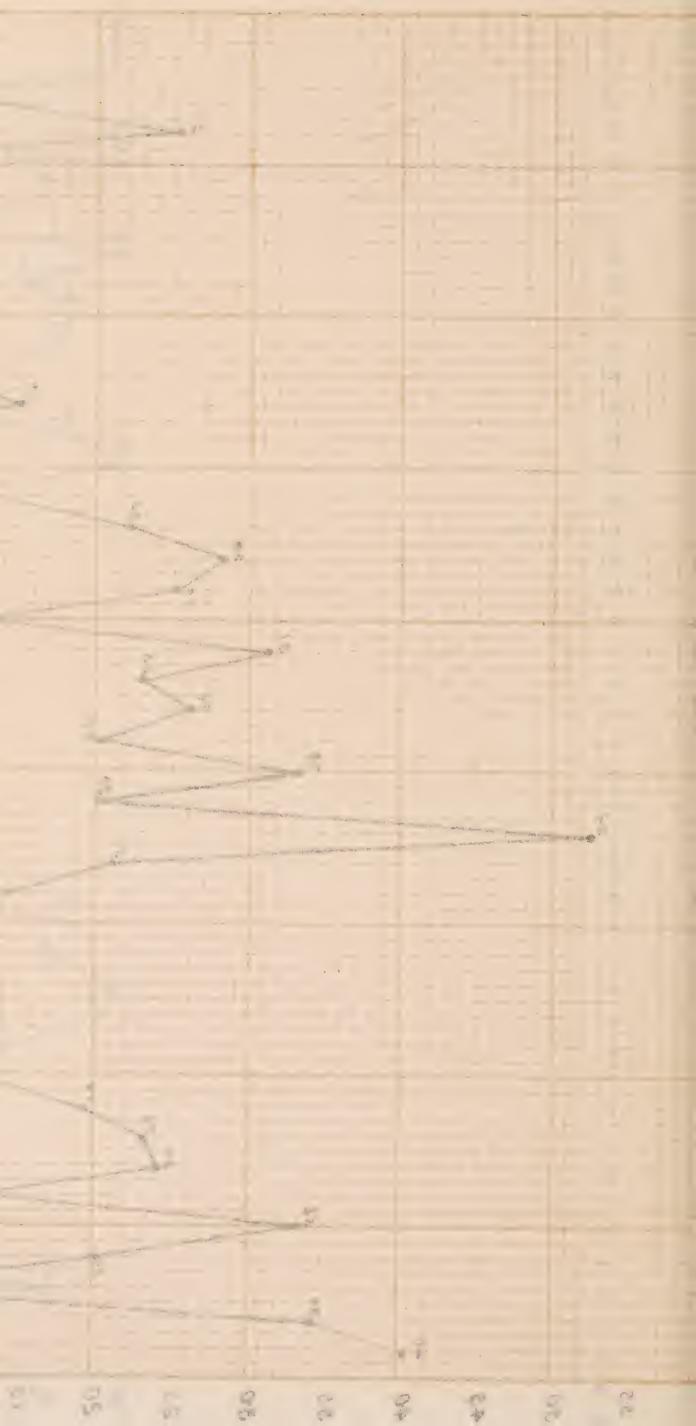
Investigations carried out in the municipal laboratory.

Specimens.	Number	Resi	ılts.
			Negative
Diphtheria—swab		1436	12123 26
Tuberculosis—sputum	207	6	201
Other specimens		2	39
Total	13848	1452	12396











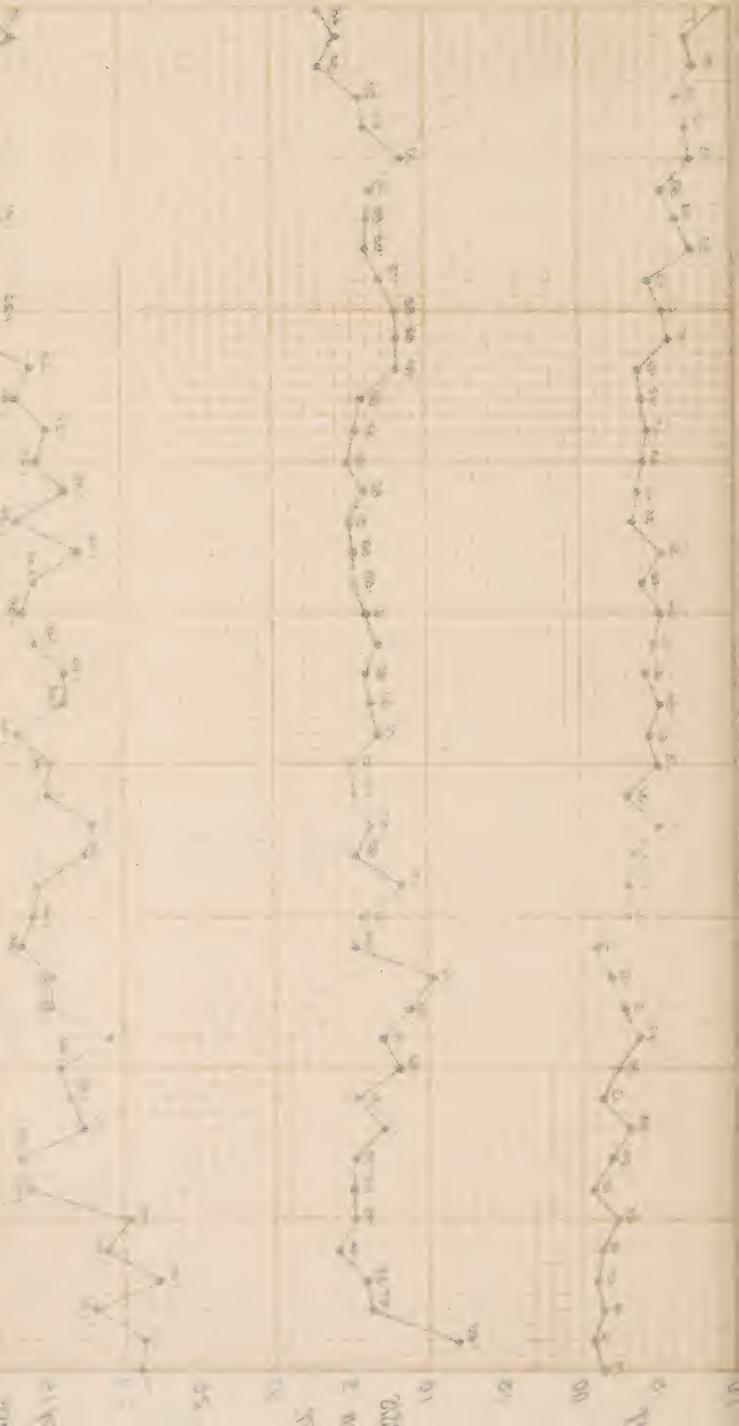


Table 29.
Vaccination returns since 1897.

	1				1	2		
YEAR.	2	3	4	5	6	7	8	Percentage not Vaccinated
	Vaccin- ated.	Insus- ceptible.	Dead.	Con- Obje't'r	Post- poned.	Removed	Un- accounted	including Columns 5, 6, 7, 8
*1897	2,680	11	390	4	7	110	7	4.9
*1898	2,696	15	383	14	1	103	15	4.6
*1899	2,625	32	346	10	3	94	16	4.8
*1900	2,654	10	367	5	12	82	18	$4 \cdot 2$
1901	2,639	4	391	11	29	59	24	4.4
1902	2,788	4	342	7	12	58	34	3.8
1903	2,977	8	325	2	6	62	11	2.6
1904	2,940	- 7	341	10	10	42	25	2.8
1905	2,923	3	270	6	10	29	18	2.1
1906	2,733	5	318	8	12	39	22	2.8
1907	2,810	9	257	24	19	49	17	3.7
1908	2,858	18	248	70	11	35	20	4.5
1909	2,720	8	241	81	9	33	11	4.7
1910	2,731	3	255	131	3	23	19	6.0
1911	2,750	9	277	148	5	26	14	6.5
1912	2,646	4	249	216	12	23	4	8.7
1913	2,499	6	296	339	14	27	9	13.0
1914	2,654	11	281	348	6	22	24	13.0
1915	2,352	2	189	367	9	34	15	15.3
1916	2,056	4	186	287	3	39	24	14.6
1917	1,702	4	158	267	1.	6	45	15.7

^{*}The above Returns are for St. Helens Sub-District of the Prescot Union, which does not include quite the whole of the Borough.

Table 30.

Classification according to age of the cases of and deaths from diphtheria.

Ages.	Under 1 year	1—5	5—15	15—25	25—45	45—65	65 & over.
Cases Deaths	4 3	183 59	486	62	21 0	0	0

Table 33.

Classification according to age of the cases of and deaths from scarlet fever.

Ages.	Under 1 year.	15	5—15	15—25	25-45	45—65	65 & over.
Cases Deaths		181	339 12	28 10	8 0	0 ()	0

Table 34.

Classification according to age of deaths from measles.

Ages.	Under l year.	1—2	2—5	5—15	15—25	25 and over.
Deaths Death-rate per 1,000 of the population at these	3	12	11	***************************************		
ages,	•11	4.7	1.4			

Table 35.

Classification according to age of the deaths from diarrhæa and enteritis.

Ages.	Under 1 y e ar	1–2	2–5	5-15	15–25	25-45	45-65	65 and upw'ds
Deaths	27	10	5	3	_	1	2	

Table 36.
Classification according to age of the cases of pulmonary tuberculosis.

	0-1	1–5	5–15	15–25	25-35	35-45	45–55	55–65	Over 65	Total.
Males Females		1	4 8	15 18	$\begin{array}{c} 25 \\ 21 \end{array}$	20 11	11 6	2 2		77 67
Totals		1	12	33	46	31	17	4		144

Table 37.
Classification according to age of the cases of non-pulmonary tuberculosis.

Ages	Under 1 year	1-5	5-15	15–25	25-35	35-45	45–55	55-65	Over 65	Total
Males Females	1	$\frac{7}{9}$	6 6	2 2	3	3				21 19
Total	1	16	12	4	4	3				40

Table 38.

The admissions and discharges at Eccleston Hall.

	ing in a t, 1918.	Males Females			6 2c	ಾವಿ	
	Remaining in on Dec. 31st, 1918.	1	ಣ	က	10 2c	ರ	
	Dismissed for ansatisfactory behaviour.	Females					
	Dismissed for unsatisfactory behaviour.	Males					
	Left without permission.	Males Females		07			
	Le with permi				4		4
	ed	Females	*		12 1c		
0	Died during 1918	Males			30		
	Discharged luring 1918.	Females	5.	30	8 1c	0_	_
	Discharged during 1918	Males	∞	22 5c		∞	c1
	itted ; 1918.	Males Females	1-	60 60 60 60 60	20 4c	∞	-
Ì	Admitted during 1918.		6	.19 6c	35 6c	13	େ
	ning in tt, 1917.	Males Females	d .	ଚା	9	÷	
	Remaining in on Dec. 31st, 1917.	Males	ଟା	1-	0	C 1	
			(Early cases)	B. (Intermediate cases).	(Late cases)	(Observation cases).	ار م رکار

* Cerebral Hæmorrhage.

c Patients sent by Lancashire County Council.

Table 39.

Age and sex classification of new cases of tuberculosis attending the dispensary.

	Pulm	onary.	Other	Forms.	Suspicio	us cases.	Totals.		
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
1-5			2	2	7	3	9	5	
5—15			5	6	24	21	30	33	
15-25	7			1	33	8	45	12	
25-35	วั	. 7			29	15	34	22	
B5—45	9	2			24	8	33	10	
£5—55	5	1			9	5	14	6	
55-65					3	2	3 -	2	
B5 upwards						•			
Cotals	27	19	12	9	129	62	168	90	

Table 40.

Number of attendences at the tuberculosis dispensary during 1918.

	Pulmonary.	Other forms	Suspicious cases.
Humber of old cases attending on 31st Dec., 193	17 182	84	24
Number of new cases during the year 1918	46	21	191
lumber of attendances during the year	1688	638	845

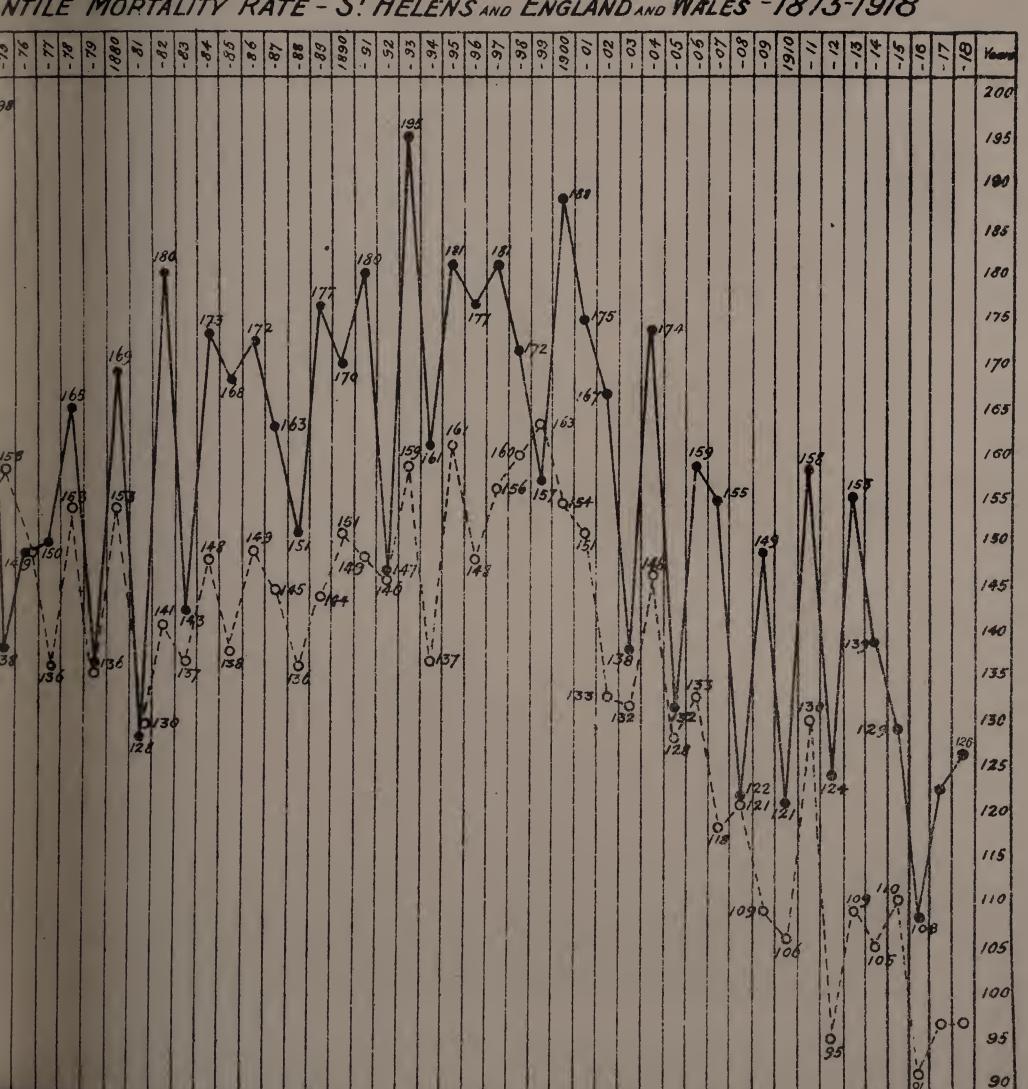
Table 43.
Statistics for St. Helens since 1873.

					<u>ئ</u> ا	18	DEATHS FROM								
YEARS.	Population.	Birth Rate.	Death Rate.	Zymotic Death Rate.	Infantile Mortality Rate.	Rate of Persons Married.	Small Pox.	Measles.	Scarlet Fever	Typhoid Fever.	Typhus Fever.	Diarrhea.	Whooping Cough.		
1873 1874 1875 1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886 1887 1888 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915† 1916† 1917† 1918†	45,500 46,188 48,668 52,246 54,463 57,534 57,522 58,807 57,575 58,903 60,263 61,584 62,932 64,311 65,718 67,158 68,628 70,132 71,509 72,399 73,576 *76,112 77,288 78,482 79,694 80,926 82,176 83,445 84,734 86,043 87,372 88,722 89,843 91,153 92,476 93,812 95,161 96,523 96,870 98,159 99,460 100,775 92,240 90,000 90,600 90,600	46.6 46.3 45.4 45.6 44.3 43.2 41.1 41.6 43.5 43.7 40.69 42.50 39.93 40.70 37.00 39.20 39.86 38.90 40.80 40.2 41.3 37.8 40.9 38.7 40.0 40.3 38.3 37.1 36.05 33.9 34.1 35.2 32.0 32.7 33.5 31.9 32.1 33.5 32.1 32.1 32.5 32.0 24.1	23.6 31.4 24.6 23.2 22.8 23.9 22.4 20.0 21.6 25.4 21.65 24.16 23.32 22.46 21.69 19.80 23.50 25.43 26.02 21.0 24.4 18.3 21.8 20.9 21.8 19.9 20.4 22.8 19.7 17.5 20.9 17.2 17.3 18.3 16.0 18.5 14.5 18.3 18.5 18.5 18.5 18.5 18.5 18.5 18.5 18.5	2.75 5.03 2.51 3.20 2.09 3.09 5.51 2.92 2.03 4.95 2.5 5.3 3.5 5.2 3.9 3.1 4.18 5.3 3.0 2.64 5.4 2.21 3.73 4.3 3.2 2.9 3.2 2.56 2.60 1.72 3.96 1.88 1.79 2.87 1.32 3.1 4.62 3.74 1.95 2.45	148 198 138 149 150 165 136 169 128 180 143 173 168 172 163 151 177 170 180 147 196 161 181 177 181 172 157 188 175 167 138 175 155 122 149 121 158 124 155 138 126 127 128 129 129 129 129 129 129 129 129 129 129		$\begin{bmatrix} 0 \\ 0 \\ 1 \\ 0 \\ 0 \end{bmatrix}$	19 29 4 101 2 4 143 0 14 205 3 131 81 102 53 38 78 19 54 23 135 21 54 38 87 17 21 59 7 59 1 11 10 145 0 145 0 145 0 145 0 155 155 0 165 165 165 165 165 165 165 165 165 165	99 238 21 12 22 82 27 235 14 16 13 34 35 11 3 181 24 18 6 14 9 59 44 24 8 25 26 17 16 4 10 29 20 20 21 21 21 21 21 21 21 21 21 21	20 19 45 42 22 35 31 32 45 43 33 7 28 34 22 81 24 26 25 26 59 40 33 30 43 43 13 13 13 13 13 13 13 13 13 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	94 110 101 1294 77 135 52 131 76 85 69 131 56 122 101 65 85 74 78 84 168 38 101 63 133 140 114 95 53 120 66 105 36 105 36 49 105 105 105 105 105 105 105 105 105 105	9 41 31 7 48 15 2 71 3 6 24 9 53 41 28 61 15 68 29 31 19 61 14 78 33 34 41 56 17 18 30 40 26 52 7 62 16 39 46 18 24 40 34 19 24	2 2 4 5 5 7 2 2 3 1 1 1 1 2 2 1 2 1 1 1 1 3 8 7 10	

†Estimated civil population

*Borough extended.

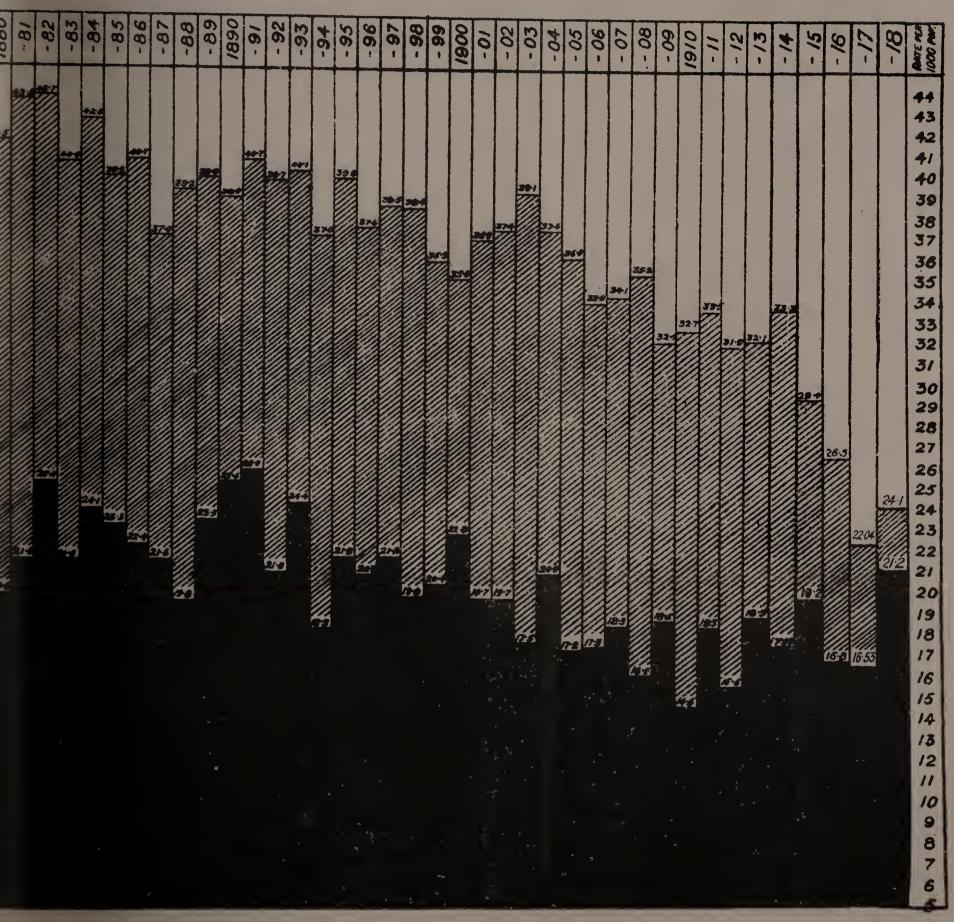
NTILE MORTALITY RATE - ST. HELENS AND ENGLAND AND WALES - 1873-1918





TH RATE, DEATH RATE AND RATE OF NATURAL INCREASE. STHELENS 1880 - 1918

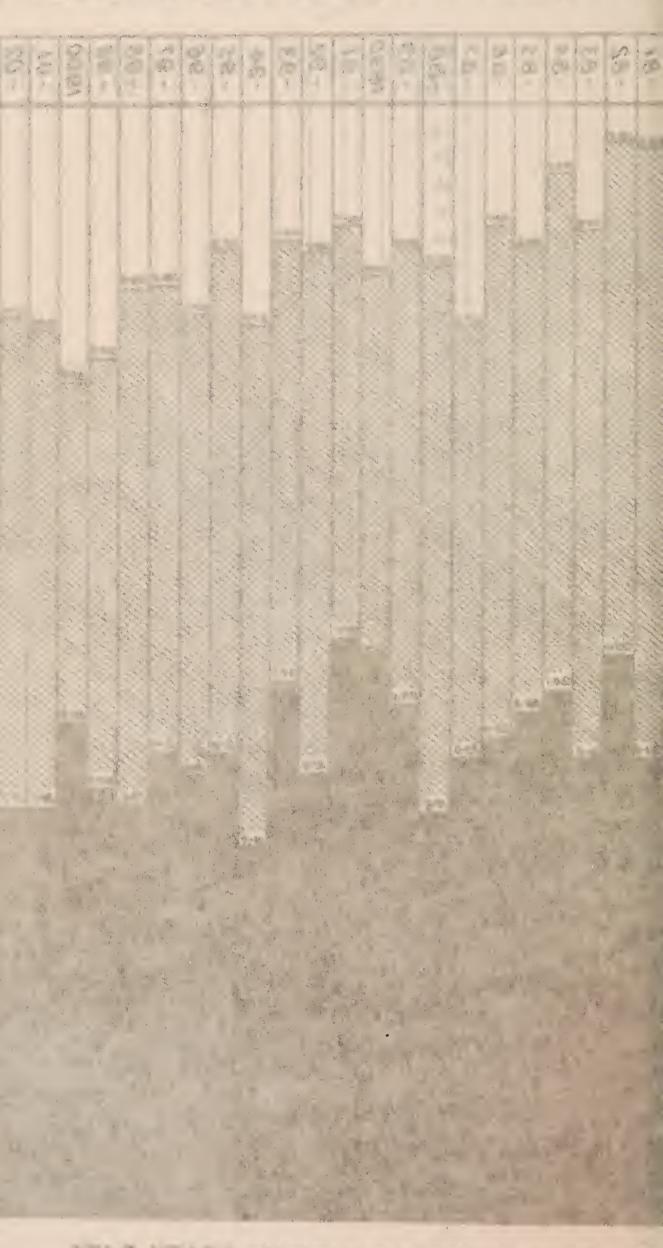
Table 42



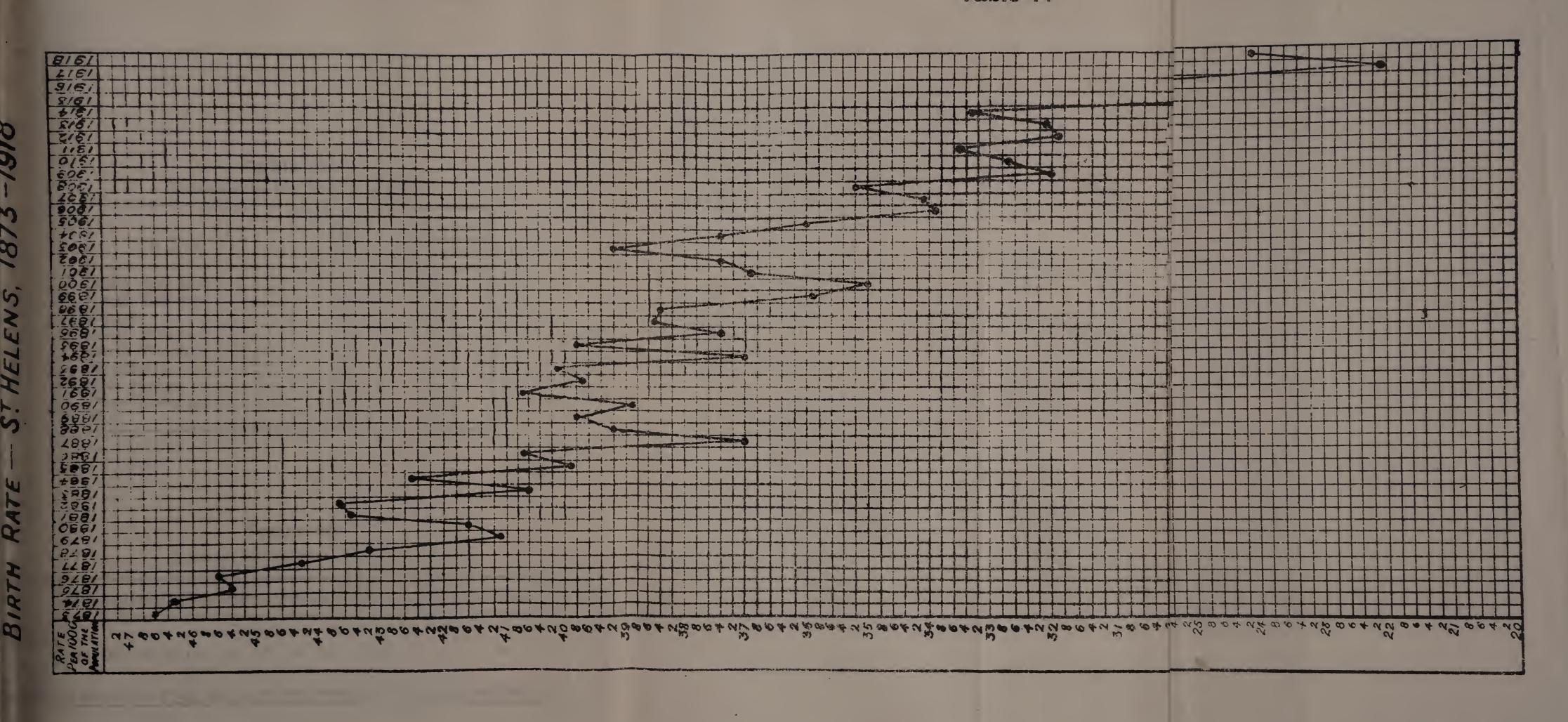
The Black portion represents the DEATH RATE.

The Shaded portion represents the RATE OF NATURAL INCREASE, or the excess of the Birth Rate over the Death Rate.

-- BIDTH DATE is represented by the shaded portion PLUS the black portion.



THE BINCH DOCTION REQUESTION THE DEATH PAITE.



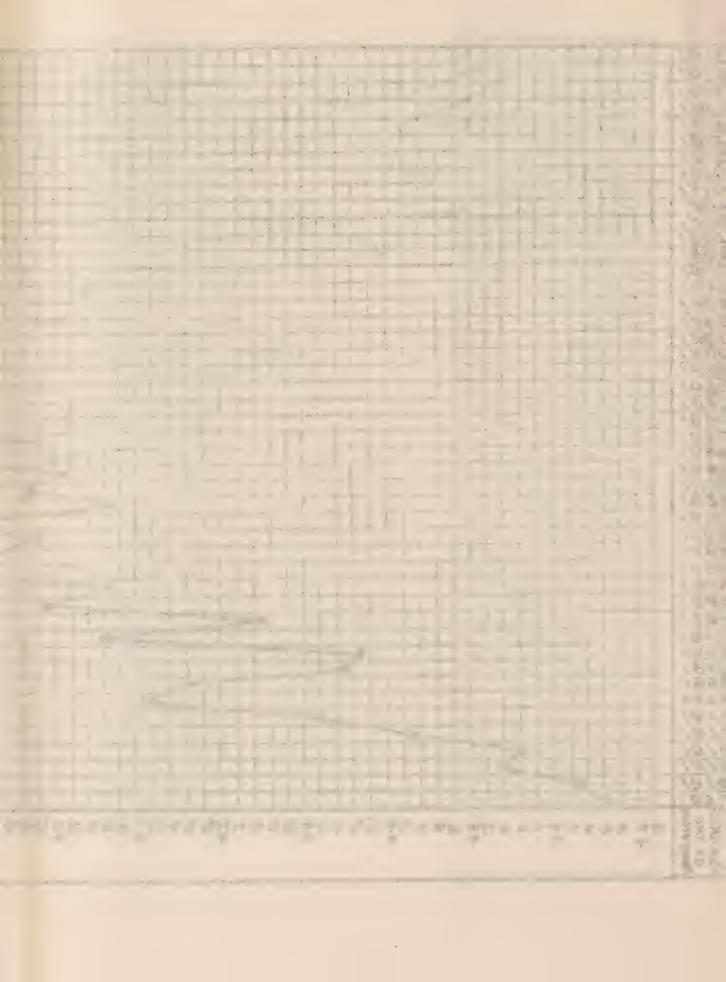


Table 45.
Birth-rates in the various wards.

WARDS.	Number of births notified.	Birth-rate per 1,000 estimated total pop'lation
North Eccleston	272	22.2
South Eccleston	290	24.4
Central	146	23.0
North Windle	207	16.9
South Windle	181	21.8
Hardshaw	304	26.3
East Sutton	358	30.9
West Sutton	309	29.9
Parr	368	30.1

Table 46.

Number of illegitimate births.

	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
er of timate hs	76	75	76	76	68	70	87	80	84	71	108	84	96	97	92	78	78	112
1,000 ulation	0.90	0.87	0.86	0.85	0.75	0.76	0.94	0.85	0.88	0.73	1.11	0.85	0.96	0.96	0.90	0.79	0.79	1.1

Table 47

Number of marriages.

	1902	1903	1904	1905	1906	1907	1908	1909	1910	191 1	1912	1913	1914	1915	1916	1917	1918
of es	578	569	576	52 9	544	632	5 79	608	637	617	691	730	706	745	568	536	57 9
rate 00 n	11.42	13.02	12.98	11.76	11.93	13.6	12.3	12.7	13.1	12.7	14.09	14.6	14 · 01	14.5	11.58	19.60	11.4

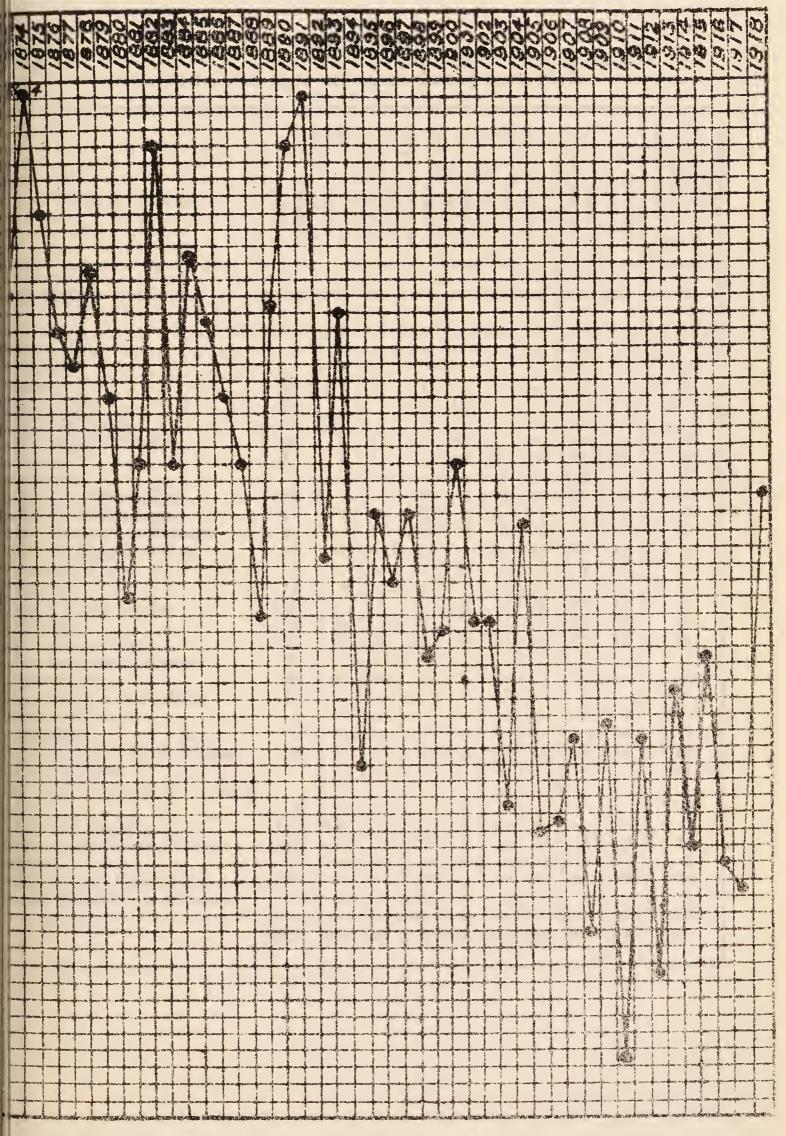
Table 49.

Death rates in the various wards.

Wards.		Death rate per 1000
North Eccleston	236	20.5
South Eccleston	192	17.3
Central	159	26.4
North Windle	185	16.1
South Windle	151	19.4
Hardshaw	233	21.4
East Sutton	208	19.1
West Sutton	239	24.8
Parr	319	27.8

Table 48

TATH RATE - ST. HELENS, 1873 - 1918.



death rate is not corrected for age & sex distribution.

WTH PATE - STHELENS, 1873 - 1918.

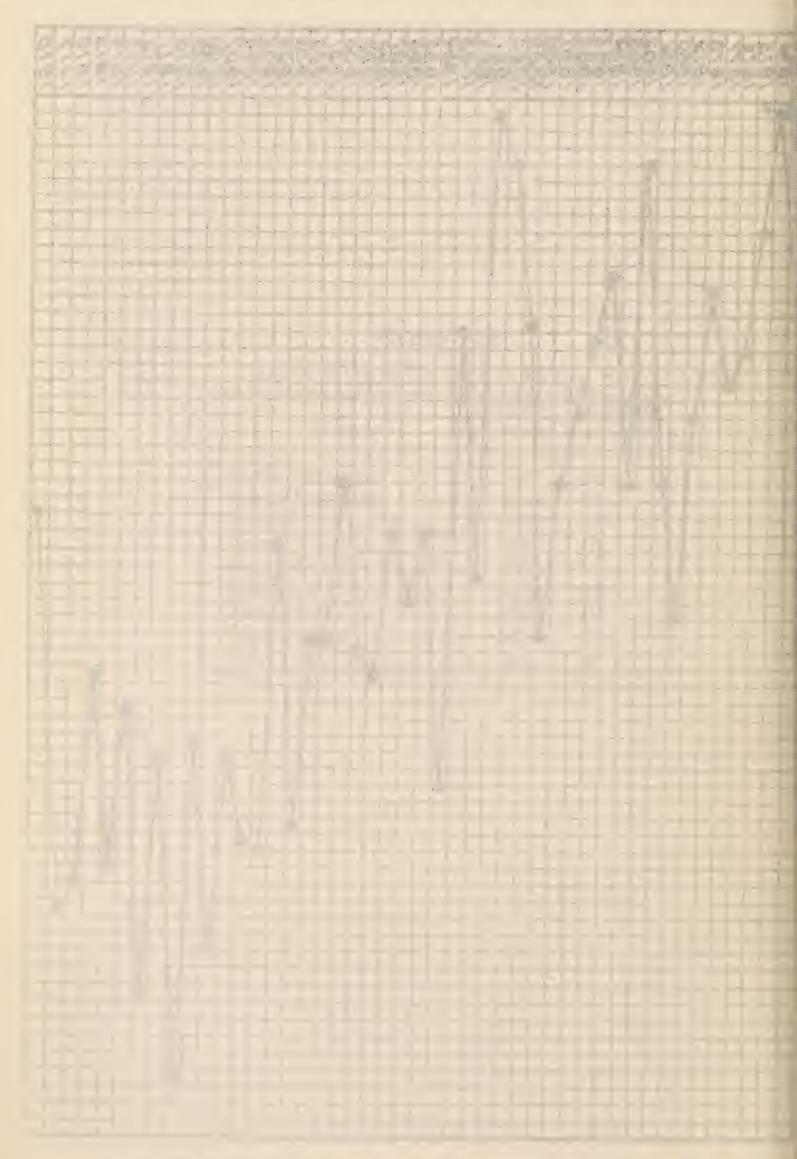


Table 50.
Causes of, and ages at, death during year 1918.

	NETT DEATHS AT SUBJOINED AGES.								whether its " or nts" in in the	
Causes of Death.	All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District.
All causes—Certified	1,922	309	124	190	188	123	302	404	282	551
nteric Fever nall-pox easles arlet Fever hooping Cough iphtheria and Croup fluenza rysipelas ulmonary Tuberculosis uberculous Meningitis ther Tuberculous Diseases ancer, malignant disease heumatic Fever eningitis rganic Heart Disease ronchitis neumonia (all forms) ther Respiratory diseases iarrhœa, etc, ppendicitis and Typhlitis rrhosis of Liver lcoholism ephritis and Bright's Disease lerperal Fever arturition, apart from Puerperal lover longenital debility, etc. iolence, apart from suicide	24 100 315 3 107 16 18 84 5 12 140 147 236 21 48 10 7 52 5 8 129 46	$ \begin{array}{c c} - & & \\ 3 & 2 \\ 10 & 3 \\ 6 & - \\ - & & \\ \hline 3 & 6 \\ - & & \\ \hline 4 & - \\ \hline 30 & 27 \\ 5 & 27 \\ - & - \\ - & - \\ - & - \\ \hline 127 & 1 \end{array} $	- 12	$ \begin{array}{c c} - \\ 11 \\ 12 \\ 9 \\ 46 \\ 34 \\ - \\ 2 \\ 35 \\ 6 \\ 5 \\ - \\ - \\ - \\ 7 \end{array} $	$ \begin{array}{c c} - \\ - \\ 10 \\ 2 \\ 37 \\ 50 \\ - \\ 8 \\ 9 \\ 2 \\ 4 \\ 3 \\ 1 \\ 32 \\ 1 \\ 3 \\ 1 \\ - \\ - \\ 2 \\ 6 \end{array} $	$ \begin{array}{c c} -\\ -\\ -\\ 1\\ 39\\ 1\\ 27\\ -\\ 4\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c c} -\\ -\\ -\\ 58\\ 2\\ 26\\ -\\ 2\\ 50\\ 1\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\ -\\$	19 	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
ther Defined Diseases		$\begin{bmatrix} -60 \\ 1 \end{bmatrix}$	$\begin{bmatrix} -13\\2 \end{bmatrix}$	$\frac{1}{12}$	13 —	9	$\begin{bmatrix} 2\\36\\1 \end{bmatrix}$	$\begin{vmatrix} 3\\84\\2 \end{vmatrix}$	99	1 173 1
	1922	309	124	190	188	123	302	404	282	551

Table 51.

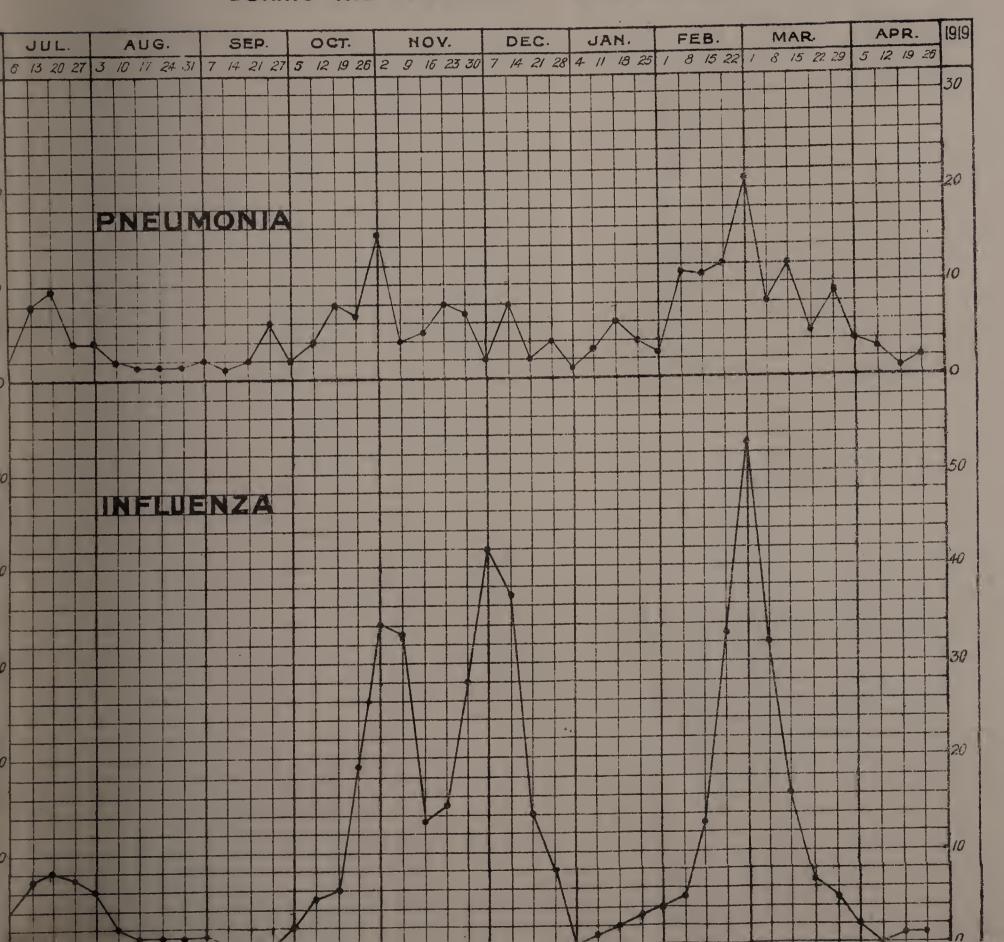
Account of magisterial proceedings taken during 1918.

DATE.	Magisterial Proceedings.	RESULT.
Jan. 4th	Offences under Sale of Food and Drugs Act, 1875, sec. 3&6. Sale of adulterated war bread improver	Fined 40 /- and 7 /6 Analyst'. Fee.
Jan. 4th	Offence under Sale of Food and Drugs Act, 1875, sec. 6. Dirt in milk	Dismissed.
Jan. 11th	. Offence under Public Health Act, 1875, sec. 91. Non-compliance with nuisance notice	Dismissed on payment o
Jan. 25th	. Offence under Sale of Food and Drugs Act, 1875, sec. 6. Sale of milk deficient in fat to the extent of 10%	Fined 20/- and Analyst' Fee.
Jan. 25th	. Offence under Sale of Food and Drugs Act, 1875, sec. 6. Sale of adulterated Yorkshire Pudding Powder	Fined 10/6 and Analyst's Fee.
Feb. 1st .*	 Offence under Sale of Horseflesh, &c., Regulations Act, 1889— 1. Supply of Horseflesh. 2. Exposing for sale horseflesh and not having over or upon his shop words indicating that horseflesh was sold there. 3. Selling horseflesh for human food, &c 	Fined £5 for supplying Other cases dismissed.
Feb. 25th .	. Offence under Sale of Food and Drugs Act, 1875, sec. 6. Sale of adulterated Sweet Spirits of Nitre.	Fined 5/-
Mar. 4th	. Offence under Sale of Food and Drugs Act, 1875, sec. 6. Sale of sausages containing an excess of water, and deficient of lean meat and fat	Fined £10.
Mar. 8th	. Offence under Sale of Food and Drugs Act, 1875, sec. 6. Sale of cheese deficient in fat	Dismissed.
Mar. 25th .	. Offence under Sale of Food and Drugs Act, 1875, sec. 6. Sale of milk containing 6 per cent. added water	Fined 10/- and 7/6 costs.
Mar. 25th .	. Offence under Sale of Food and Drugs Act, 1875, sec. 6. Sale of sausages contain- ing excess of water and deficient of lean meat and fat	Fined £5 and 7/6 Analyst's Fee.
Nov. 1st	Offence under Notification of Diseases Act, 1. Failure to notify cases of infectious diseases	Fined £10 and 8/- costs.
Nov. 22nd .	. Offence under Sale of Food and Drugs Act, 1875, sec. 6. Sale of milk containing 2 per cent. added water	Fined 40 /- and 7 /6 Analyst's Fee.

CHART SHOWING

THE WEEKLY NUMBER OF DEATHS FROM PNEUMONIA AND INFLUENZA

DURING THE EPIDEMIC. 1918 - 1919.



THE WESTER MUMBERSON

THE WESTER MUMBERSON

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Table 52.

The wards of the borough in which dwelling houses have been erected ring the years mentioned.

Year.	North Eccleston	South Eccleston	Central	North Windle	South Windle	Hardshaw	East Sutton	West Sutton	Parr	Total
1904	105	53	7	37	18	47	59	1	70	395
1905	19	93	1	44	16	90	42	10	54	366
1906	11	51		31	13	31	73	24	39	260
1907	22	38		26		22	77	3	29	219
1908	2	52		4	2	27	22		20	127
1909		36		10		10	6	3	10	75
1910	2	31		10		24	18		25	110
1911	14	20				30	75	26	12	177
1912	35	28	***************************************	4		26	28	58	1	180
1913	10	31			3	19	14	99	6	182
1914	10	42		9	16	14	20	63	29	203
1915	6	9	0	26	1	2	8	25	27	104
1916	0	12	0	1	1	2	4	16	16	52
1917					— .			9		9
1918								3		3

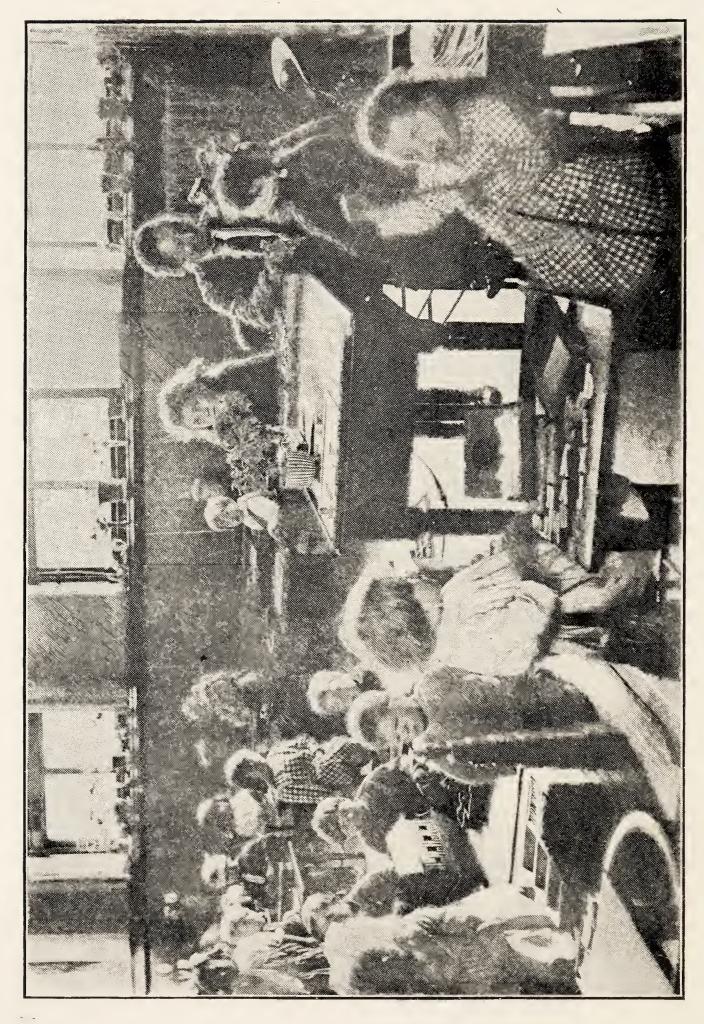
Table 53.

Canal Boats Acts, 1877 & 1884.

umber of boats inspected during 1918	• • •	• • •	• • •	v w r
imber of persons housed on board	• • •	• • •		
imber of males housed on board		,		
imber of females housed on board		* * *	• • •	• • •
erage number of persons per boat	• • •	• • •	• • •	
ats registered for five persons	• • •	• • •	* * *	• • •
imber of cases of infectious diseases on	board	the boa	ats	• • •
imber of notices and letters sent	• • •	• • •	• • •	
mber of boats without certificate or re-	gistere	d numb	er	•••
mber of boats with leakages and requi	ring pa	inting	• • •	• • •
registered boats	• • •	• • •	• • •	







SCHOOL HYGIENE.

PREFACE.

TO THE CHAIRMAN AND MEMBERS OF THE EDUCATION COMMITTEE.

LADIES AND GENTLEMEN,

I beg to submit the following report which deals with the wo of medical inspection, following up and treatment of children attending the elementary and secondary schools in the borough, carried out during the year under the general direction of the medical officer.

During 1918 owing to the war no systematic medical inspection were carried out, but 14,918 children were surveyed by the nurses. this number 2,343 were found in need of medical attention, and 1,4 received treatment.

A total of 4,763 defects were referred for treatment and of the 71.6 per cent were treated during the year.

A dental inspection of 15,867 children was made, 5,059 were treated for treatment, and 1,890 were treated at the dental clinic.

There are in the borough at the present time a large numb of children physically or mentally unfit to be in attendance at a public elementary school. A careful enquiry made during the current ye shows that more than 228 children are dull or backward to a degree rending useless instruction in an ordinary class, 94 are crippled with tuberculor and 44 with other diseases, while 48 are feeble minded, 16 are blind a 6 are deaf and dumb. For all those admission into special schools urgently needed and is the only method by which these unfortunate children be taught to be self-supporting, and prevented from becoming a burd on their parents or a charge on the community.

It would seem that a special school designed on open air line would be a fitting memorial to those who have given their lives in the ordeal through which the country has passed.

The sanitary condition of many of the schools in the borough emands the early attention of the committee.

I have pleasure in acknowledging the cordial co-operation of secretary for Education.

I am, Ladies and Gentlemen,

Your obedient servant,

July, 1919

JOSEPH CATES.

At the beginning of 1918 there were in the borough under the control of the Education Committee 38 schools with 83 departments. Seven were provided schools and thirty-one non-provided. There was accommodation for 23,747 children, 19,704 being on the roll, with an average attendance of 16,228.

At the end of the year the number on the roll was 20,049, and the average attendance 18,352.

The number of children under five years of age attending school of 31st January, 1919, was 980.

The following visits were made during the year:—

By the school medical officers—

By the school nurses—

The number of children examined is set out in table 1, on page 58

Table 2 shows the number of serious defects found by the nurses a brought to the notice of the parents.

On re-visiting a school, children found defective at the previous viswere re-examined by the nurses.

Table 3 gives a return of exceptional children in the area.

An inspection clinic is held in the medical officer's department at 1 Town Hall. The work of the inspection clinic is growing to such an extent that the necessity of providing further accommodation is urgent. Mul overcrowding occurs and the clerical work of the nurses is greatly imped

During 1918, 703 children were seen at the clinic, a total of 1,9 attendances being made.

Table 4 shows the conditions from which the children were sufferi)

Of the children, 1.7 per cent were not receiving medical attenti

The Treatment Clinic is situated in Claughton Street. The diseast treated are those affecting the eyes, ears, nose and throat, and teep ringworm of the scalp by means of X-rays and also minor ailments.

The treatment of the children at the clinic is generally carried out by private practitioners appointed by the Local Authority. There is a whole time school dentist. Minor ailments, however, are treated by nurses acting under the directions of the school medical officer. The supervision of the medical, surgical and dental work done at the clinic is in the hands of the school medical officer who is directly responsible to the Committee. The medical practitioners are part time officers, each attending at the clinic for one half day per week.

A fee not exceeding two shillings is recovered from parents found on enquiry able to pay for treatment. Children obviously necessitous are sent direct to the clinic so that there may be little delay.

During the year under consideration, the number of cases dealt with is given in table 5.

Table 6 shows the nature and extent of the dental treatment.

The following up of children discovered at the time of inspection to be suffering from diseases or defect is entirely carried out by nurses in the medical officer's department and the re-examination of the cases treated is performed by the assistant medical officers. The various duties usually performed by the health visitors and school nurses are so allocated that by placing each nurse in charge of a district a considerable amount of overlapping is avoided and the saving of time thus effected allows a more comprehensive system of after-care to be adopted.

The steps taken to detect and prevent the spread of infectious disease in the schools have now been re-organised and there is a daily visiting of the schools by the nurses.

For several years the school attendance committee has expressed alarm at the loss of grant consequent on the proportion of children in regular attendance at the public elementary schools in the borough. The activities of the school medical service and particularly the system of exclusion of children in contact with infectious diseases were largely blamed for what was considered by the committee to be an extremely unsatisfactory percentage of attendance.

The figures given in the following table show that from 1900 to 1904 there was a period in which a low level was reached, that the percentage rose to 91.5 in the following year and continued round about 90 until 1914. As the work of school medical inspection did not begin before 1909 it would

seem that other reasons must be sought for the falling percentage of recent years.

Year.					Pe	rcentage.
1900		ø ø o	• • •			82.4
1901					• •	83.8
1902						82.6
1903						84.7
1904	• • •					$86.4 \cdot$
1905						91.5
1906						92.9
1907				• • •		91.9
1908						92.1
1909						90.1
1910						91.0
1911	0 0 0	• • •				90.4
1912						90.7
1913			• · •			89.3
1914						89.3
1915						87.5
1916						87.9
1917						85.8
1918						84.9

Towards the end of 1918 it was suggested that children in contact with infectious disease might be allowed to attend school provided that suitable arrangements were made for the daily examination of each child by a nurse.

The borough was therefore divided into twenty districts each containing one or more schools with approximately a thousand children in attendance. A nurse was placed in charge of each district and therein acted as health visitor and school nurse, in fact carried out the public health duties for which a woman is specially qualified.

Early in the morning session the nurse visits the school, enters each class room and makes a brief survey of every child, paying particular attention to "contacts" and those concerning whose condition the class teacher desires an opinion.

Children who appear feverish or otherwise ailing are sent home, minor ailments, on the parents request, are treated on the school premises.

The school attendance register is examined and a card is made out for every child absent for two consecutive days. On returning to the office the cards are distributed among the nurses and a home visit is made by the nurse of the district in which the absentee lives. At the time this scheme was put into force there were only a few children excluded from school on account of contact with infectious disease, in fact only some fifty children who would otherwise have been excluded were re-admitted to school.

Immediately this system of daily visiting to schools was put into operation there was a noticeable improvement in attendance, the children came to school cleaner in person and more tidy in clothing, and parents at once began to seek the advice of the nurse. While this scheme has been in force the percentage of attendance has been about 91, and the teachers generally are in favour of the innovation.

On the other hand these new duties entail a large amount of work both in the schools and in visiting the homes, but it is certain that an improvement is being effected in the health of the children.

School closure on account of an epidemic of influenza was put into operation on the following occasions:

16th October to the 18th November.

29th November to the 7th January, 1919.

Table 7 gives a summary of treatment of the defects found in children in class to class examination.

Necessitous children requiring free meals are reported to the district care committee by head teachers and others. Inquiries are then made concerning the circumstances of the parents. If the children cannot be properly fed by the parents owing to unfavourable home conditions, they are supplied with meals at the School Feeding Centres.

Breakfasts and dinners are provided at four centres, namely, Windle Pilkington, Merton Bank, Robins Lane and Thatto Heath Schools. Dinners only are provided at five centres, viz.: Higher Grade, Rivington Road, St. Peter's, The Gerard and Parr Flat Schools; and breakfast only at Sutton Manor Centre. The meals are prepared at the centres and are served by paid attendants assisted by teachers. At Sutton Manor centre the meals are cooked at a private house free of charge. The Gerard centre was closed on the 19th July, 1918.

The total number of meals given during the year was 88,025.

The average total cost per meal is 3.81 pence; while the average cost per meal for food only is 2.55 pence.

At the request of the education committee, 80 scholarship candidates were medically examined, and under regulations made by the committee and relating to teachers absent from duty, medical certificates were granted on 16 occasions.

Five hundred and sixty children on whose behalf application had been made for exemption from attendance at school, were examined with respect to their physical fitness to undertake employment; in 495 instances no cause of rejection was discovered, and in 65 cases the children were found to be suffering from a defect requiring treatment.

The clerical work arising out of medical inspection is of necessity very heavy. During 1918, 5,998 exclusion notices, 4,423 admission notices 901 preliminary notices, 4 final notices, 5,059 dental notices, 3,554 mis cellaneous notices and several thousands of letters were sent out from the medical officer's department.

No general scheme for the teaching of hygiene and temperance has been adopted in the borough. In some of the schools, however, the work is performed by individual teachers. Physical and breathing exercises are carried out in each school. No arrangements have yet been made for open-air schools, school camps or similar institutions.

Table I.

Inspection, Treatment, &c. of Children during 1918.

(1)		14,918
(3)	The number of children in (1) who were referred for treatment (excluding uncleanliness, defective clothing, etc.)	2,343
(4)	The number of children in (3) who received treatment for one or more defects (excluding uncleanliness, defective clothing, etc.)	1,409

Return of defects found in the course of medical inspection in 1918.

	CODE G	ROUPS.	SPEC	IALS.
Defect or Disease.	Number referred for treatment.	Number requiring to be kept under observation, but not referred for treatment.	Number referred for treatment.	Number requiring to be kept under observation, but not referred for treatment.
1)	(2)	(3)	(4)	(5)
SKIN Malnutrition	• •		8	23
Head		• •	809 92	
Rad	• •		$\frac{19}{26}$	
Scabies			208	, .
Impetigo			277 73	i 6
EYE Defective Vision and Squint			$\begin{array}{c} 912 \\ 52 \end{array}$	15 1
EAR Defective Hearing		• •	109	2
Теетн Dental Disease				
Nose { Enlarged Tonsils			$\begin{array}{c} 496 \\ 7 \\ 25 \\ \end{array}$	3 2
HEART AND CIRCULA- TION Heart Disease Organic Functional			 8	 2 83
Lungs { Pulmonary Tuberculosis				10 80 82
NERVOUS { Epilepsy				6 16
Non-pulmonary Tuberculosis— Glands Bones and Joints Other Forms Rickets	• •		5	10 4
Deformities			1 117	83

Table 3.

Numerical Return of all Exceptional Children in the Area in 1918.

			Boys	Girls	Total
(including partially blind).		Attending Public Elementary Schools Attending certified schools for the blind Not at school	8 1 2	8 7 3	16 8 5
DEAF AND DUMB. (including partially deaf).		Attending Public Elementary Schools Attending certified schools for the deaf Not at school	2 4 —	4 5	6 9 —
MENTALLY DEFICIENT.	Feeble Minded.	Attending Public Elementary Schools Attending certified schools for mentally defective children Notified to the Local (Control) Authority during the year Not at school	28	20	48
	Imbectles Idiots.	At school	2 3	1 	2 4 —
Ерісерт	1CS.	Attending Public Elementary Schools Attending certified schools for Epileptics Not at School	10	$-\frac{6}{2}$	$\frac{16}{3}$
	Pulmonary Tuberculosis	Attending Public Elementary Schools Attending certified schools for Physically Defective Children		53	88
Physically Defective.	Other forms of Tuberculosis	Attending Public Elementary schools Attending certified schools for Physically Defective children	56	38	$ \begin{array}{c c} 20 \\ \hline 94 \\ 1 \\ 26 \end{array} $
	Cripples other thanTuberculosis	Attending Public Elementary Schools Attending Certified schools for Physically Defective children	$ \begin{array}{ c c } \hline 12 \\ \hline 29 \\ 2 \\ 1 \end{array} $	15	26 44 3 3
DULL AND	Backward*	Retarded 2 years	121	$\begin{array}{ c c }\hline & & & \\ \hline & 63 & \\ & 22 & \\ \hline \end{array}$	184 44

^{*} Judged according to age and standard.

Table 4.

Classification of defects among children attending the inspection clinic.

HE	AD.		Speech.	
	Sores	4	Defective Speech	0
	Other diseases	12	MENTAL CONDITIONS.	
SK	IV		Mentally defective	0
POK.	Ringworm, sealp	7	Dull	0
	Ringworm, body	20	HEART.	
	Scabies	$\frac{68}{6}$	Anæmia	14
	Impetigo	$\frac{6}{2}$	Others	0
	Psoriasis	1		
	Eczema	3	Lungs. Bronchitis	53
	Other diseases	4	Suspected phthisis	0
m	V T		Other diseases	()
Тн	ROAT AND NOSE DEFECTS. Enlarged tonsils and			
	adenoids		NERVOUS SYSTEM.	0
	Enlarged tonsils	11	Epilepsy Chorea	$\frac{0}{6}$
	Adenoids	9	Paralysis	Õ
	Other diseases	22	Others	0
Gr.	ANDS.		Tuberculosis.	
	Enlarged	11	Phthisis	6
	Abscess	J	Glands	1
EV 37	na		Bones and joints	1 ()
Ey	Conjunctivitis	5	PKIII	()
	Blepharitis	5	RICKETS	0
	Ulcers	2	17	,
	Squint Defective vision	$\frac{11}{52}$	KIDNEY DISEASE	1
	Other diseases	9	GENERAL DEBILITY	70
EA	RS.		Rheumatism	4
	Discharge	5		
	Deafness	3	OTHER DISEASES	263
	Other diseases	11		

Table 5.
Classification of cases treated at School Clinic during 1918.

	Treatment carried on from previous year.	New Cases.	Treatment completed.	Treatment not completed at the end of the year.	Partially treated.
Eye defects	56	361	392	14	11
Nose and throat defects Diseases of the teeth		$\begin{array}{c} 98 \\ 1,890 \end{array}$	96 1,890	$egin{array}{c} 2 \ \dots \end{array}$	
Ringworm of scalp	$\begin{array}{c} 12 \\ 146 \end{array}$	$\frac{15}{862}$	$\frac{26}{881}$	1 127	
	214	3,226	3,285	144	11

Table 6.

Dental inspection and treatment.

AGES	Number inspected in schools	pected Number requiring		Number treated at school clinic		Extraction		Anæsthetics		lings	Mis-
	Boys Girls	Boys (4	irls Boys	Girls	Tempor- ary	Per- manent	Local	Nitrous Oxide	Amalgam	Cement	Scalings &
4 and under 5 5 ,, 6 6 ,, 7 7 ,, 8 8 ,, 9 9 ,, 10 10 ,, 11 11 ,, 12 12 ,, 13 13 ,, 14	180 17 596 57 641 62 1,022 97 1,005 98 1,046 83 1,029 1,01 1,014 99 872 81 760 71	2 226 3 0 261 3 8 174 3 9 329 3 3 361 3 0 364 3 7 297 3 6 246 3	39 22 271 84 308 109 359 54 311 104 328 166 304 160 260 94 314 107 176 62	14 94 101 114 106 108 112 84 97 98	72 454 527 447 510 626 594 249 162 55	14 77 71 74 57	36 174 194 164 202 260 260 166 192 130		3 15 29 33 39 32 34 67 56	11 19 21 26 24 22 41 13	
Totals	8,165 7,70 15,867	$ \begin{array}{c c} 2 & 2,389 & 20 \\ \hline & 5,059 \\ \end{array} $	670 962 1,8	928	3696		1778		308	181 89	

Table 7.

Treatment of Defects of children during 1918.

CONDITION.	No. of defects found for which treatment was considered necessary.		No. of defects for which no report is available.	of defects treated.	Results of Treatment.			No. of defects not treated.	nt. of defects treated.	
	From previous year.	New Cases	Total	No. of which have	No. o	Reme- died.	Improved.	Un- chang- ed	No. o	Per cent.
Clothing	12	247	259	3	205	122	54	29	51	79.1
Footwear		22	22	ï	21	21				95.4
Cleanliness of Head	66	809	875	44	738	371	239	128	93	84.3
Cleanliness of Body	11	92	103	4	94	48	37	9	5	91.2
Nutrition	3	8	11	1	10	1	4	5		90.9
Nose and Throat	211	528	739	123	239	137	73	29	377	32.3
External eye disease.	81	52	133	17	111	58	46	7	5	83.4
Ear Disease	106	109	215	34	165	75	67	23	16	76.7
Teeth										
Heart and Circulation	1		1		1			1		100.0
Lungs				• •						
Nervous System									• •	
Skin	308	603	911	29	881	777	90	14	1	96.7
Rickets										100
Deformities	1	1	$\frac{2}{10}$	• •	$\frac{2}{8}$	1	1		• •	100.0
Tuberculosis P'monary		5	10	2	$\frac{8}{2}$	1	7		• •	80.0
,, Non-Pulmonary			2	• •	2		1	1	• •	100.0
Speech	• •		• •	• •			• •	• •	• •	
Mental Condition	976	019	1 900	160	757	475	158	124	269	50 7
Vision and Squint		912	1,288	$\begin{array}{c} 168 \\ 2 \end{array}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	198	124	363	58.7
Hearing Miscellaneous	$\frac{5}{62}$	125	$\begin{array}{c} 5 \\ 187 \end{array}$	$\frac{2}{8}$	$\frac{3}{176}$	1	40	3	3	$60.0 \\ 94.1$
miscenaneous	02	12()	101	0	170	133	40	3	3	7年,1
Total	1,250	3,513	4,763	436	3,413	2,221	818	374	914	71.6
					·					,

